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**WBL Project:**

**"Methods of measuring  
the Added-Value that  
SABIS® offers to its  
students"**

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# Summary

In this project the added value in education is investigated in two components: the academic and the social added value. By using the case study method I have attempted to define the different aspects of the added value and via interviews, questionnaires, school data and statistical analysis to measure them.

During the period I was working on my thesis I faced major challenges: demanding workload combined with my family as well as personal challenge to stay unbiased and arrive to objective conclusions. If I was successful or not will be certainly judged by the educational community to which this work is donated.

The whole study shows that SABIS® and especially ISF (Internationale Schule Frankfurt-Rhein-Main) offer to the students added value in sciences, in discipline, in team building, in the quick integration to the international environment. The languages are the important weapon of every International School. Each from our graduates speaks at least three languages which opens the doors to an international career and to various Universities. The individual fostering to students and the continuous monitoring of their academic results is to be commended as a positive aspect of the system.

The margin for improvement is also important: the policy makers of that system must review the materials, the method of instruction and the financial reward of the staff in order to achieve not only the successful continuity of the network but mainly to become leaders on the quality international education market.

I found it necessary to include some suggestions for the improvement of the SABIS® system but also my thoughts about the education in general as my main goal is to contribute to the upgrade of the education worldwide and provoke other colleagues to work further in that direction.

# Chapter1

## Introduction

The study of the added value in education seems to be a very popular topic among scientists. More than 35 million web sites currently explore different issues related to this area. It looks as if there is no reason for somebody to continue working on this subject. All questions have been already answered. All possible patterns have been found. Is there anything left to be addressed? The answer is positive. Education is a live and continuously evolving area, for me synonym to freedom, influenced by different factors such as the teaching methods, the financial means, and the social and cultural environment. In that respect no matter how many studies have been carried out, there would be always room for new approaches. Every study includes different given parameters and has diverse aims.

I have been working in the field of education for more than 20 years. During my career I had the opportunity to get to know various educational approaches and appreciate their advantages but also study their weak points. The last eight years I have been working in Frankfurt in Germany, at ISF (Internationale Schule Frankfurt-Rhein-Main) where I have the position of Head of Mathematics and recently the IB and Upper Secondary Coordinator. Also I have been involved in projects for the Marketing. ISF is one of the 52 International Schools that belong to the SABIS® School Network in Asia, Europe, Africa and the United States. The SABIS® system has been in place for many years. However, no survey of its value added has been carried out so far. The reasons for which I decided to undertake this research are the following:

- There were enough resources available for the topic (books, articles, Internet documents). At this stage, I find necessary to mention that SABIS® implies a method of continuous assessment of its students. Therefore I had an enormous data of records of their performance not only academically but also socially (SLO™<sup>1</sup>, Student Management Office).
- My long experience in the field of education and the material I have been keeping for many years were invaluable assets for the successful completion of my research and an opportunity for me to contribute to this important topic.
- People I trust completely, like some of my colleagues, my supervisor and my university advisor, agreed that it was a very good idea, since it may investigate a brought area of education methods.
- As a parent of a child at ISF, I was very interested in measuring the added value of the system to my daughter. The fact that my daughter is expected to spend another 5 years as ISF student provided me with a strong incentive for the identification of possible weak points and helped me to make suggestions for improvement.
- As Department Head of Mathematics, I was particularly interested to examine those parameters that influence the academic and social progress of the students and were directly related to the work of the Math Department.
- The owner of the network considered this project feasible and of major importance for possible improvements. The identification of the strong elements of the SABIS® may help in focusing the future efforts and investment in staff and other resources with the aim of ensuring that value added will continue and, if possible, further strengthened.
- Given that competition in the field of International Schools may increase over the coming years, the Marketing of SABIS® School Network with a view to better explaining its value added to the parents may use the outcome of my research.

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<sup>1</sup> SABIS Student Life Organization®

To also note that the fact that students were involved in my study will deserve full consideration. This point was also mentioned from the feedback I got from my advisor and the other candidates. Against this background, I would mention that; I was in close cooperation with the legal advisor of the school who knows very well the issue and I was asking his continuous feedback to ensure that all necessary safeguards (prior consent of the parents, anonymity etc) were prudently taken. The owner of the school was also well aware of this issue, and he himself monitored the relevant initiatives. In the same vein, to note that German legislation is quite strict and clear and it was for the mutual benefit of all to ensure that no operational or legal risk arise.

The first school of the SABIS® School Network started operating towards the end of the 19<sup>th</sup> century. Today it grows very fast given the big demand for International Schools all over the world. It implements a unique educational system and the official statistics show that the academic results of its students in exams such as IGCSE, A-Levels and AP exceed the world average in many cases (see data, chapter 6). Maybe the first spontaneous reaction could be that obviously such an educational system offers added value to its students. According to projects presented in the past, the good academic results measure and confirm the success of educational systems. Usually politicians use similar statistics to support their planning and convince the voters about their ability to develop correct strategies in education. However, many educators face with a lot of scepticism this approach as very superficial. I fully agree. The students should be seen as wholes and not only as machines reproducing accumulated knowledge. The school has today a more complex role to play than in the past. The society has become very competitive, the high technology embraces our lives, the human relations turn out to be more fragile and the means of communication change the future of the inhabitants of that planet dramatically.

As a math teacher and a member of the administration of the SABIS® School in Frankfurt, I decided to study the profile of our student body and try to measure the added value, if any, that SABIS® offers to its pupils. Even though SABIS® schools function for more than a century, there is no other study related to that matter. I perceived this project as a challenge for me not only as a member of the staff but also as a parent. As a member of the staff I tried to remain unbiased. I have to admit that this was not an easy task. Having worked for more than seven years for the Math



Department as teacher and Department Head I had to stand back and try to judge the outcomes of that effort objectively. As member of the administration I became wiser because I have had the opportunity to be deeply involved in every goings-on that took place in our campus and get feedback. As a parent I had to remind myself several times that this was a scientific project and not a field for personal complaints or criticisms.

After all I hope that this assignment will contribute to the improvement of education for the benefit especially of those children who are not among the most privileged.

# Chapter 2

## Terms of Reference <sup>2</sup>/ Objectives

### 2.1 Ways of using the Literature for developing my own Research

I initially assumed that total mastery of the relevant literature is necessary before proceeding with the initial stage of formulating a research question. Knowledge of the literature on a particular topic is certainly helpful, but it was important for me to keep in mind that it does not automatically lead to the formulation of a question worth answering. Most research questions are formulated and reformulated several times, as the researcher takes into consideration an increasingly wider range of issues (see Bem, 1987).

Knowledge of theory, research design, and statistics is implicated in the very act of framing a question. As a researcher thus I inevitably draw on literature that was not specifically "on the topic." A willingness to acquire a broad and rich background in theory and to learn the strengths and weaknesses of various research designs, data collection methods, and approaches to data analysis were considered by me as prerequisites for carrying out sophisticated work.

How should one make use of the literature? And how does one go from knowledge of a literature to using the literature to develop an interesting thesis? "Science and humanistic scholarship are," writes Becker (1986) in his book on social science writing, "cumulative enterprises. None of us invent it all from scratch when we sit down to write. We depend on our predecessors. We couldn't do our work if we didn't use their methods, results, and ideas. Few people would be interested in our results if we didn't indicate some relationship between them and what others have said and done before us" (p. 140).

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<sup>2</sup> In my references the asterix indicates material, which was used for defining methods to measure the added value that SABIS and in particular ISF (Internationale Schule Frankfurt am Main) offers to its students. The rest of the bibliography will enable me to take in consideration techniques and extend my horizon of research.

I had to focus my resource management in the key words of my thesis: methods, measurement, value-added. My core studies in mathematics were closely related to the first 2 words: methods and measurement. However in that case the mathematical approach of the problem had to be original and attempt to measure the added value that is provided by a network of International Schools. In the web I found several articles concerning the definition of the added value not only in the field of education but more generally. I was impressed by the fact that none of those articles could be used intact to label what I had in my mind. One reason was that SABIS® is an educational system, which uses its own methods in order to assess its students. Briefly it is a network of International Schools in Europe, Asia, Africa and America. It is not selective and uses the regular testing as method of assessing the learning process. The core subjects are Languages and Mathematics. The pupils develop their social skills through the SLO™ (SABIS Student Life Organization®) program. Thus by participating and/or creating activities related to academics (e.g. study groups), sports arts, theatre, music, and service for the local community. In order to have a holistic view of the network I have considered the SABIS® handbook (See literature Review).

The added value was a very challenging component of my research. As I mentioned already the richness of the resources took a considerable amount of my time. Bibliography shows that there are completely different approaches in the definition of the added value in education. Some of them are related to some standards (financial, social) of the local communities, to goals of politicians (the parameters which were taken into consideration were those which clearly served a political campaign) and in other cases the approach was too theoretical or too specific. In the past few decades, the quality of schools was measured almost exclusively in terms of inputs, such as number of books in school libraries or the qualifications of the teachers. Value-added analysis of standardized test score data has emerged as an attractive complement to traditional means of measuring school effectiveness. It is very interesting that value-added performance data can play an important role in aligning policies, recourses and instructional strategies. The books<sup>3</sup> used as a resource for the definition of the Added – Value are the following: 2, 5, 16, 17, 20, 23, 26, 28, 29, 30, 31, 33, 35, 39, 52, 53, 54, 56, 60, and 64. The articles<sup>4</sup> I have consulted are: 1, 2, 4, 5, 6, 8, 12, 16, 18, 22, and 30.

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<sup>3</sup> List of books presented in the Literature Review

<sup>4</sup> List of articles presented in the Literature Review

In my situation the added value was defined specifically for the SABIS® system. It covers two sides of it, the academic and the social. The literature<sup>5</sup> helped me to realize that it was realistic to focus my research as the Internationale Schule Frankfurt-Rhein-Main (ISF) where I work and use the local parameters to identify and measure with more accuracy the added value of the SABIS® educational system. One important factor for that decision was the common principles, material and teaching methods throughout the schools of the network. Nevertheless, the local community has its own influence to my results. In Frankfurt the International Schools operate mostly with students who move from one country to another but also its clients are coming from the upper social and financial class of the German society. In some SABIS® schools in USA, which operate as state schools the mixture of cultures and standards, are obviously different.

The mathematical part of that research is quite extended. The existing bibliography<sup>6</sup> offers different mathematical models that translate the facts to numbers and statistics. In my thesis I had plenty of raw material to use: data from placement tests, academic results registered on weekly basis, SLO™ activities, university acceptances, feedback from the alumni of the school, the parent network, students who continued their school career in other institutions and documents of accreditation of the school.

Before I decided to use the case study as methodology for my dissertation I consulted a long list of books, articles and web sites where a detailed analysis of the different methodologies was presented. As I will explain later in the Methodology Chapter the literature<sup>7</sup> reveals that the case study is an ideal tactic when a holistic in depth investigation is needed. One of the main fears of every researcher is the ethical need to confirm validity. The triangulation method assures the power of the process. In particular, it is important that teachers and schools be held accountable for their contributions to achievement, not outcomes outside their control. The level of achievement reflects what the pupil learned from past teachers and schools (see placement tests), from his family (information taken from the personal file of every

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<sup>5</sup> Books written on Education presented in the Literature Review: 3, 10, 13, 15, 27, 32, 34, 45, 46, 47, 48, 49, 51, 57, 58, 59, 60, 61, and 62. Articles from the Literature Review: 3, 7, 9, 10, 11, 17, 20, 27, 32, 31, 34.

<sup>6</sup> Books used for my research are 1, 7, 9, 11, 18, 55, and 63. Articles: 15, 19 and 23. See Literature review.

<sup>7</sup> Additional resources related to case study are the following books; 4, 6, 12, 19, 24, 25, 41, 42, 43 and articles: 14, 25, 26, 29, and 33. See Literature Review

student but only partially), and from his peers (SLO™ program in my case). The measurement error was another goal of my research. The statistics offer mathematical models that can solve in a satisfactory way this problem. Among the resources I have used for the statistical analysis of my results I would like to mention “The mathematical Methods for Physics and Engineering” of K. F. Riley, M. P. Hobson and S. J. Bence. There are, in fact, two separate schools of thought concerning statistics: the frequentist approach and the Bayesian approach. Indeed, which of these approaches is the more fundamental is still a matter of heated debate. In the above-mentioned book the authors were concentrated primarily on the more traditional frequentist approach. This book covers very interesting parts of statistics like experiments, samples, populations, estimators and sampling distributions, the maximum-likelihood method, the method of least squares and the hypothesis testing. All the above material was used as the basic foundation of my statistic analysis.

Economists typically approach the challenge of measuring school effectiveness within the context of a standard education production function. A typical production function might include the achievement of student  $i$  in year  $t$ , the student's achievement in the previous year, the vector of school characteristics, a vector of measurable family background characteristics that affect achievement and a random error term (Hanushek and Taylor, 1990). In practice, however, for a variety of conceptual, practical, and political reasons, it is difficult if not impossible, for a network like SABIS® to specify an appropriate vector of family background and school resource variables. Hence the complete model was not implemented. However, this model gave me ideas for a construction serving the purposes of my research.

“Modeling for Added-Value” by Macredie, Paul, Ankctell, Lehaney and Warwick was of major importance for the development of this thesis. This book provides a window onto current research and practice in modeling techniques and highlights their rising importance across the business, industrial and commercial sectors. The book contains contributions from a mix of academics and practitioners. The systems described in this book enabled me to use ideas of modeling from different areas and implementing them in education expecting that my results will allow SABIS® and external stakeholders to react promptly to my outcomes and target and improve the operations and activities of this network of International Schools.

I found “Feedback for Learning” an important reading. Edited by Susan Askew tries to answer the question “when and how does feedback promote learning.” In the last ten years the accumulation of evidence on schools’ effectiveness and improvement has focused the attention of policy makers on the possibilities for improving educational practice, pupil performance and overall standards. This book gives a remarkable view on what is value added feedback, the measurement of the added value, the different types of value added, interpretations of value added feedback, and use of added-value results for school self-evaluation. The following evaluation strategies are suggested as particularly effective: an intensive monitoring system which tracks the students throughout their school career; a clear, shared focus on high expectations for all students in the school; a realistic awareness that evaluation data are only aids to teaching and learning; the importance of including multiple perspectives in the school self evaluation process and being realistic about the capacity of the staff for using the data.

The bestseller *Research Methods in Education* was another precious tool for the development of my theory. Written by Louis Cohen, Laurence Manion and Keith Morison covers a whole range of methods currently employed by educational researchers. It provides both theory and practical guidelines for conducting educational research.

Jonathan Crane gives a definition of value added in education in his policy report published on November 2002: The best way to measure school quality or teacher quality for that matter is to determine how much they change their students’ scores each year. This is nothing more than the simplest and more direct way to measure how much students are learning. This approach is called “value-added”, because it focuses on how much value a school or a teacher is adding to what students bring with them. This argument looks attractive but does not include the social impact of the school to the students. In my case this would be part of the parameters I intended to measure.

One of my main concerns during the project was the fact that every researcher is biased<sup>8</sup> by different factors. Among my readings was the theory of Georges Devereux who developed the theory of transference and counter transference. It acknowledges that the analyst is not a neutral expert and that “working through” unconscious attitudes ought to

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<sup>8</sup> Books used for validity and ethics are: 14, 22, 44. Articles: 11, 13, 21, 24 and 28. See literature Review

form a continuous part of the analyst's everyday practice that may lead to a greater understanding of a relationship. He acknowledged Albert Einstein as his most important source of inspiration when he quoted the phrase: "we can only observe the phenomena that occur near or inside the experimental apparatus and the observer himself is the most important part of the apparatus". For me while it was important to recognize the existence of subjective, active and unconscious influences on me it was even more important to ask the pragmatic question; how these influences be detected and analyzed? According to this theory the first component to take into account was gender. The second component was my age and position. The third component was my professional status and social attitudes towards the topic being researched. The fourth component was then the way I as researcher was positioned and understood within society as a whole. I believe that this knowledge made me more conscious and hopefully more sensitive in the required objectivity of that project.

Last but not least I would like to mention the Grounded Theory<sup>9</sup> of Glaser and Strauss. Grounded theory is a qualitative methodology, which derives its name from the practice of generating theory from research, which is "grounded" in data. Formally introduced by the sociologists Barney Glaser and Anselm Strauss in the *Discovery of Grounded Theory* (1967), this methodology emerged as an alternative strategy to more traditional approaches. How I viewed and used the Grounded Theory will be described in the chapter that covers my methodology.

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<sup>9</sup> Books used on Grounded Theory: 8, 21, 36, 37, 38. See bibliography section.

## **2.2 Objectives**

My intention was to present a systematic research methodology which would allow the investigation and assessment of the added value provided by the SABIS® educational system. My experience includes a variety of educational systems like the Greek national system, the Montessori and the International Baccalaureate. Being a teacher and a manager gave me the opportunity to test the SABIS® system in many ways. I arrived at the conclusion that because of its unique teaching methods, a detailed study of the added value that offers to its students and a development of methods to measure them would be a tool of major importance for the Marketing of the network. As member of the staff I had the opportunity to exchange feedback with my colleagues on regular basis. I use to keep detailed notes from all the meetings and as Department Head to implement ideas, which may help our students. Given that the teaching methods and the organisation of the 52 SABIS® schools are almost identical the advantages and disadvantages of the system are on discussion among 4000 colleagues in different countries all over the world. I found as a very attractive opportunity to work on a subject that indirectly will influence positively the image of the network.

The last 2 years, there is a pressure for more private schools in Frankfurt. In particular, at least 3 International Schools are planning to open in Hessen. Given that the fees of those schools are very high and Frankfurt is a financial centre for Europe, a very strong antagonism is to be developed among the different educational business. Having that in mind I started my research, which attempted to measure the added value of the system to our students. It is obvious that the Administration of the network was ready to help me with my research in all means but expecting that the outcome will be a weapon against the antagonists of SABIS®. Even though, I was expecting that SABIS® would have tried to restrict the research in the positive areas of the system, this did not happen. I was well aware of the fact that my colleagues would give me their full support as they did in my project about the orientation of the staff for my Masters Degree.

One of the issues I had to resolve in order to be successful with my thesis was my heavy workload in the school and at home as mother and wife. As I mentioned before the administration of ISF, where I work, took in consideration the fact that I was working in the same time for a project related to SABIS® and they tried to give me a reasonable



weekly schedule. However, from the beginning of the project I was not very optimistic about that, since my main responsibilities were already much extended. As per my family, I had always the support of my husband who is very highly educated person and gives me his full support for my professional development. I should not underestimate the role of my 12 years old daughter who appreciates the fact that her mother is studying and takes full responsibility of her homework

The methods implemented by Middlesex University played a significant role in my decision to become once again worker researcher. The guidance provided was detailed and always to the point. The materials were of high quality and the advisors qualified and ready to listen and give feedback. All the above created a very good framework.

As a worker researcher I had access to all information I needed for my project. This information included several documents (e.g. placement tests, results of internal and external exams, breakdowns), possibility to gather feedback from students, parents, colleagues, potential customers, graduated students and colleagues who worked for SABIS® in the past years. Given that I had the full support of the owner of the network I did not face any difficulties in covering the sources of information, and the key people. I consider as an advantage the fact that no further expenses were required for that project than my personal effort. My accumulated experience helped me to apply the methods of research, which had a minimum cost for the time, and patience of those who were ready to participate in my research. Even though the first collection of data came only from ISF, I tried to extend this data with a number of other schools from the network. I am on line with the administration teams of all SABIS® schools. Therefore, I had easy access to their feedback.

As I mentioned already, my thesis may be used in the future as the main tool of the Marketing Department. It is expected to give a solid base to those who promote the SABIS® network and plan to open new schools in cities where a pressing demand for International education exists. Often I had to ask myself how I should react if I will be asked to restrict my research in the positive areas of the system. I have decided that it was not very difficult for me to separate the role of the employee and the researcher for a very simple reason: I was not only an employee but also a mother of a child who attends ISF. Therefore by definition, I wanted to make sure that my daughter attends a

challenging and successful school with high expectations. One of my goals was to contribute to the improvement of a system, which showed that it knows how to survive for more than 100 years. However, the scientific discussion about the added value of an educational system, based exclusively on official data will hopefully contribute to the development of the education in general. If this will happen, then this thesis has been successful.

### **2.2.1 Parent objectives**

In order to define the scope of the study I needed to ask:

- Is there any added value from the SABIS® educational system? Measuring schools' and teachers' contributions to student achievement is a central part of school accountability systems. The definition of the added value is the starting point. The determination of the different components will show the direction of the researching. In particular, it is important that teachers and schools be held accountable for their contributions to achievement, not outcomes outside of their control. Only part of the student's current achievement is, however, determined by its current teacher and school. The above-mentioned issues will be studied and analyzed.
- If there is added value, how this could be measured? Which characteristics of the students should be included? Nationalities, financial background, results of placement tests, period of time spending in ISF, others? It will be taken into consideration that to compute a teacher's value-added, we do not give her credit for her students' incoming level of achievement, but we do give her credit for gains in achievement that students regularly make under her guidance.
- Why the findings of that research are reliable? Which percentage error was calculated?

**In order to answer these questions, as a major part of my project, I had:**

- To find if there is any social added value. Which definition of the social added value is the most appropriate for that study? Which are its components? Who is defining them? Which is the contribution of the system, if any to the balance and positive attitude of the pupils towards education, classmates and the society?
- To find if there is any academic added value. It is necessary for the researcher to define carefully the parameters that define precisely and accurately some aspects of the academic added value. Some factors like the scores of external exams and the acceptances to Universities could be considered as objectives and others as the expectations of the parents and the students of local interest. However in both categories useful results can be extracted.
- To measure academic and social performance. The discussions about the measurement of those two factors continue and will continue forever. The approaches are different and take into consideration parameters that reflect the individual situation of every educational system.

### **2.2.2 Other objectives**

- To determine the relative importance of SABIS Student Life Organization®<sup>1</sup> and Student Management Office<sup>2</sup> for the added value of the system. Both departments have a unique position in the SABIS® system. Students run the SABIS Student Life Organization® and its goal is to be conjunction between the school and the society. Does SLO™ accomplish its mission or is used mainly as a tool from the Marketing of the network to attract customers? How does the discipline system work? Does it facilitate the life in the school community? Are there any margins for improvement?
- To seek anecdotal evidence from the staff, the students, the parents and potential customers. The ISF community has a very dynamic population. As International School has a considerable turn over in terms of students and staff. How do these members of the school perceive the school life? Which are their expectations? Which are realistic? How the management would be persuaded to make changes wherever needed in order to improve the system? Which measures should be taken? Which is the estimated cost in money and time?

- To collate the above evidence in order to conceptualize my findings from the existing records of the school. ISF as member of the SABIS® system has in place records for every student and for a quite extended period of time. These records could be used as main tools for the statistical analysis.
- To search relevant literature. In the field of the added value in education the literature is a strong tool. In the Web, in the newspapers but also in the bookstores there is an invaluable collection of studies. Only a very small amount of that information is feasible to be used for that project. However the literature supports and controls the findings of every research.
- To make proposals about the future update of that project. The ISF has a history of 12 years only. In the future it will be necessary for other researchers and probably me to recalculate the findings by reassessing all the components currently used.

## **2.3 Outcomes**

**The outcomes would be:**

- A body of evidence to define social and academic added value.
- Methods of measurement of academic and social value.
- An up to date bibliography to support work in that area.
- An action plan for future development of the above-described methods.
- A research project to inform the scientific community about my findings.

Value- added performance indicators give board members, central office administrators, principals, and teachers the opportunity to base critical decisions on measures that have greater precision and fewer flaws than average test scores and other traditional indicators of performance. In combination with other means of gauging process, value added measures provide a basis for guiding decision making in several key areas:

- Policies and programs: Even though SABIS® is a very reserved educational system not open to new ideas and fashions, the existing antagonism in the field of the International Schools worldwide leads to a careful glance at reliable findings.

- **School reforms:** In which areas the school community needs more attention?
- **Curricula:** SABIS® provides the curricula to the schools of the network and is also the publisher for the majority of the books used in its schools. How this sensitive area will be influenced by the conclusions of the project?
- **Teacher compensation:** The last years one of the serious problems education faces worldwide is the shortage of teachers. There are different explanations about the reasons for that phenomenon. Nevertheless the majority believes that the reason is mainly the insufficient financial compensation. Especially in the field of sciences a lot of schools face a serious problem in hiring qualified and experienced staff. Which part of the added value is influenced by the contribution of the teachers? How can this be evaluated? Which incentives could be given to the teaching staff? Which kind of support? How the high turn over of the staff influence the added value that SABIS® possibly provides to its students?
- **Professional development:** Every school is a small community with particular characteristics. The staff that runs every school influences policies and efficiency. Should the professional development be offered only to the teaching staff or every member of the staff should have the possibility for professional development. Which are the goals? Which are the incentives?
- **School involvement:** The findings of the research will show in which areas the school should expand its activities towards the society. Often some private schools have a snobby approach and do not see themselves as active members of the local society. Does the school offer a realistic approach of life to its students by involving them in various projects? Are all students' active members of the community? Do they learn via the school life experience and learn how to be self-sufficient?

# Chapter 3

## Methods and Action

### 3.1 Research method

The methodology to accomplish my goals and objectives was a case study. I followed four stages:

1. **Design the case study:** The first step in my case study research was to establish a firm research focus to which I could refer over the course of study. I established the focus of the study by forming questions about the problem of the definition and the measurement of the added value of SABIS® to its students. I determined a purpose of the study. I investigated the object of the case study in depth using a variety of data gathering methods to produce evidence that leads to understanding of the case and answered the research questions. My research questions were targeted to a limited number of events (Internationale Schule Frankfurt-Rhein-Main). To assist in targeting and formulating the questions, I conducted a literature review<sup>10</sup>. This review established what research had been previously conducted and led to refined, insightful questions about the problem. Careful definition of the questions at the start pinpointed where to look for evidence and helped determine the methods of analysis. The literature review, the definition of the case study, and the early determination of the potential audience for the final report guided how the study would be designed, conducted, and publicly reported. During the design phase of the case study research, I had to determine what approaches to use in selecting my cases to examine in depth and which instruments and data gathering approaches to use. Careful discrimination at the point of selection helped me erect boundaries around the case. A key strength of my case study involved using multiple sources and techniques in the data gathering process. The data gathered in my case was largely qualitative but also quantitative. Other tools to collect data were

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<sup>10</sup> Basey, M. Case study research in Educational Settings, Cohen, L. Research Methods in Education, Feagin, J., Orum, A., A Case for Case Study, Kuniavsky, M. Observing the User Experience: A Practitioner's Guide to User Research, Lauren, B. Design Research: Methods and Perspectives, Tannen, D. How to contact your own Survey. See also from the Literature review Articles 26, 29

interviews, surveys, documentation review, observation, and in some cases the collection of physical artefacts. I tried to use the designed data gathering tools systematically and properly in collecting the evidence. Throughout the design phase, I had to ensure that the study was well constructed to ensure validity and reliability.

- II. **Conduct the case study:** My case study generated a large amount of data from multiple sources. The systematic organization of the data was very important to prevent me from becoming overwhelmed and from losing sight of the original research purpose and questions. An advanced preparation assisted me in handling my large amounts of data in a documented and systematic fashion. Databases were prepared to assist with categorizing, sorting, storing and retrieving data for analysis. The gathering of data using multiple techniques strengthened the study by providing opportunities for triangulation (See Literature Review: Triangulation Thinking, Dr. Sharon L. Bender) during the analysis phase of the study. As investigator I had to be able to ask good questions and interpret answers. I had to review documents looking for facts, but also read between the lines and pursue corroborative evidence. I was obliged to be flexible and not feel threatened by unexpected change or missed appointments. I was open to contrary findings. From the beginning I was aware that I was going into the world of real human beings who may be threatened or unsure of what this case study could bring. It was crucial for the reliability of the case study to maintain the relationship between the issue and the evidence.

- III. **Analyse the case study evidence:** I examined the raw data using many interpretations (Anketell, D. Modelling for Added Value, Gigerenzer, G. & Selten, R. Bounded Rationality: The Adaptive Toolbox, K. F. Riley, M. P. Hobson and S. J. Bence, The Mathematical Methods for Physics and Engineering) in order to find linkages between the research object and the outcomes with reference to the original questions. Throughout the evaluation and analysis process I was open to new opportunities and insights. I had opportunities to triangulate data in order to strengthen the research findings and conclusions. I had to categorize, tabulate, and recombine data to address the initial propositions of the study, and conduct crosschecks of facts and discrepancies in accounts. Focused, short and repeat interviews were necessary to gather additional data to verify key observations. Some of my techniques include placing information into arrays, creating flow charts and tabulating frequency of events. I have used the quantitative data to support the qualitative data. Unfortunately I could not use feedback by other investigators to gain the advantage provided when a variety of perspectives and insights examine the data and the patterns because I was the first who attempted to measure the added value that SABIS® provides to its students.
- IV. **Develop the conclusions, recommendations and implications:** My goal was to prepare a report that transforms a complex issue into one that could be understood, allowing the reader to question and examine the study (Denzin, N. (1984). The Research Act. Englewood Cliffs, NJ: Prentice Hall). Normally case studies present data in a very publicly accessible way. I tried to display sufficient evidence to gain the reader's confidence that all avenues had been explored. I have used review audience to review and comment on the draft document. Based on the comments, I rewrote and made revisions (Ratcliff, D. (1995). For an Extensive Discussion of Qualitative Validity and Reliability, The Ethics of Educational Research. (1989). Lewes: Falmer, Burgess (Ed), Tannen, D. (1992). How to Conduct Your Own Survey. New York: John Wiley. 232 pp).



Case study is an ideal methodology when a holistic, in depth investigation is needed and is designed to bring out details from the viewpoint of the participants by using multiple sources of data, as in my case, questionnaires, interviews and official records of school results. My case study is focused on two issues: definition<sup>11</sup> of social and academic value and methods of measuring these added values. Another reason for which, I have chosen this methodology is the fact that it is also known as a triangulated research strategy. The need of triangulation arises from the ethical need to confirm validity of the process. Validity in qualitative research, relates to whether the findings of the study are true and certain. 'True' in the sense of the findings accurately reflecting the real situation. 'Certain' in the sense of the finding being backed by evidence. In this paper I have used the data triangulation. Data triangulation involves the use of different sources of information. A key strategy was to categorize each group of stakeholders for the program that I was evaluating. Then, I included a comparable number from each stakeholder group in the valuation study. For example when I decided to conduct in-depth interviews to gain insight onto what the stakeholders perceived as outcomes of my study I interviewed then representatives of each stakeholder group. I triangulated by looking for outcomes that they were agreed upon by all stakeholder groups. I had chosen this type of triangulation because it is the most popular and the easiest to implement.

An expected criticism is that the results of a case study are not widely applicable in real life. However, any educator who is ready to try something innovating and wants to invest for the shake of his students could use the outcome of this project, despite the fact that its origin comes from a very unique educational system.

As a worker researcher, I had to possess or acquire the following skills: the ability to ask good questions and to interpret the responses, be a good listener, be adaptive and flexible so as to react to various situations, have a firm grasp of issues being studied, and be unbiased by preconceived notions.

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<sup>11</sup> Brolin, D. E. (1992). Life Centered Career Education: Personal-Social Skills. Reston, VA: The Council for Exceptional Children. Stock No. P368. Evangelauf, J. (March 11, 1992). At Public Colleges more Double Digit Tuition Growth. Chronicle. of Higher Education, 38(27), 29,32. Kohn, A. (September 1999). The Schools Our Children Deserve. Houghton Mifflin

For the definition of the added value that SABIS® provides to the students, I have used questionnaires and carried out interviews and for the determination of the methods that measure the added value, school documents and the existing bibliography. Given that the added value is one of the favourite subjects under investigation in education, I used the relevant interesting findings as base for the development of my project. I am expecting that the definition that I present will reflect the reality for the community of International Schools and certainly will be attractive for every educator regardless the educational system where he is involved.

The reason for which I did not choose Action research or Soft systems is that both methods intend to lead to changes in the environment under study. In my case, the scope of the study is restricted in the definition, investigation of existence of added value of a particular educational system and the determination of methods to measure this added value. The ethnography was discarded because it requires the active participation of the researcher as part of the project. In my case, it is obviously impossible to become a student and provide data. Experiments and surveys could be only seen as part of my research techniques, since alone couldn't produce methods of measuring the added value.

### 3.2 Data collection techniques and analysis of the data

As I have chosen the case study methodology, in my project I used the following collection techniques<sup>12</sup>:

**Questionnaires:** were addressed to staff, administrators of the school, members of the staff who left SABIS® students (Grades 10 to 13), students who graduated from ISF, parents (I had easy access to the Parent Network), students who left ISF and they are currently in other International Schools in Frankfurt area, potential customers (with the support of the Marketing department, a short questionnaire was given to be completed by those who were contacting this Department within some months). No survey can achieve success without a well-designed questionnaire. There were nine steps involved in the development of my questionnaires:

1. Decide the information required.
2. Define the target respondents.
3. Choose the method(s) of reaching the target respondents.
4. Decide on question content.
5. Develop the question wording.
6. Put questions into a meaningful order and format.
7. Check the length of the questionnaire.
8. Pre-test the questionnaire.
9. Develop the final survey form.

I preferred the open-ended questions because they assure a broader range of opinions. I was aware of the fact that open-ended questions have a number of advantages when utilised in a questionnaire:

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<sup>12</sup> Evans, W. H., Evans, S. S., & Shmid, R. E. (1989). Behavior and Instructional Management: An Ecological Approach. Boston: Allyn and Bacon. Fairfield University Controller. (1995). Analysis of Revenue and Expenditures from Fiscal Year 1989 – 1995. Fairfield, CT: Fairfield University. McBride, R. (1996) Teacher Education Policy: Some issues Arising from Research and Practice. Routledge. Rushkoff, D. (1999). Say it with Presentations: How to Design and Deliver Successful Presentations. New York: McGraw-Hill. 154 pp. Bishop, G. (November 1989). Alternative Strategies for Education. Palgrave Macmillan. K. F. Riley, M. P. Hobson and S. J. Bence. The mathematical Methods for Physics and Engineering, Second edition. Bennett, D. C. (president of Earlham College) (Spring 2001). 'Assessing Quality in Higher Education', Liberal Education, Vol. 87, 2

- They allow the respondent to answer in his own words, with no influence by any specific alternatives suggested by the interviewer.
- They often reveal the issues, which are most important to the respondent, and this may reveal findings, which were not, originally anticipated when the survey was initiated.
- Respondents can 'qualify' their answers or emphasise the strength of their opinions.

However, open-ended questions also have inherent problems which mean they must be treated with considerable caution. For example:

- Respondents may find it difficult to 'articulate' their responses i.e. to properly and fully explain their attitudes or motivations.
- Respondents may not give a full answer simply because they may forget to mention important points. Some respondents, who tend to expand or forget the original question, need to be reminded of the topic they are expected to give their views.
- Data collected is in the form of verbatim comments - it has to be coded and reduced to manageable categories. This can be time consuming for analysis and there are numerous opportunities for error in recording and interpreting the answers given on the part of interviewers.
- Respondents will tend to answer open questions in different 'dimensions'. The one disadvantage of this form of question was that it required the researcher to have a good prior knowledge of the subject in order to generate realistic/likely response options before printing the questionnaire. However, I believe that this understanding was achieved and the data collection and analysis process were significantly eased.

I had distributed 410 questionnaires and 227 of them were returned and evaluated (see table in section 5.1)

**Interviews:** I interviewed people with a more global view of SABIS®. These were students who were in grades 12 and 13, all the Heads of Departments, the President and Vice-President of the Parent network of ISF, colleagues who work in other International Schools in Frankfurt and parents who have withdrawn their children from ISF. As it is presented in the section 5.2 I interviewed 18 people out of 25 I had in my plans.

My interviews had four stages: arrangements, preparation, the actual interview and the reconstruction. Once I had decided to interview someone, I called in advance to make an appointment. If I felt the need to do so or was asked to elaborate on the purpose of the interview, I was brief and general. I knew that the shape of the findings might change as I was continuing my research. Given that I was interviewing several persons in connection with my project, I interviewed the principal person last, because I was better prepared based on what I had learned from the earlier interviews.

I did as much preparation as possible in advance depending also on the person I was going to interview and/or the topic to be considered during the interview. I formulated my questions in advance in writing and brought them to the interview. Several times I had to ask additional questions, based on what the interviewee was saying or something new that came to my attention on the spur of the moment. Some casual conversation to start with would always help relax both of us. My questions were as short as possible. I gave the respondent time to answer. I tried to be a good listener. I found of major importance to absorb the atmospherics of the locale where the interview was taking place, with particular attention to what might be a reflection of the interviewee's personality and interests. I noted characteristics of the interviewee that might be worth mentioning in my study. I was inviting the person to call me if she/he thought of anything pertinent after the interview. After the interview, I had to review my handwritten notes. In my haste while taking notes, I may have written abbreviations for words or phrases that won't mean anything to me a day or two later. Or some of my scribbling may need deciphering, and, again, it was more likely I would be better able to understand the scribbles soon after the interview. I underlined or put stars alongside quotes that seemed most compelling. One star for a good quote, two stars for a very good one, etc. This method would speed the process when I got to the writing stage. The Interviewees did not accept to be recorded. I had their permission to take notes. This could be seen as a disadvantage for the validity of my findings. However I had an

assistant moderator who attempted to make notes and tried to capture exact phrases and statements made by participants. The consideration here was that the note taking should not interfere with the discussion. I consider these notes complete and professional. In addition, Morgan (1988) suggests that regardless of the method of data collection, the moderator should make field notes after each session to facilitate data analysis.

**Documents:** records kept by ISF concerning placement tests, results of external exams, results of internal exams, accumulative reports, where the academic progress of the students was shown but also possible infractions, SLO™ (SABIS Student Life Organization®) reports with the records of activities for the students, lists of acceptances for the Universities for graduating students, records of the student Management Office with the different infractions of students, relevant bibliography<sup>13</sup>.

My study was both qualitative (questionnaires, interviews, bibliography) and quantitative (documents). The fieldwork comprised the questionnaires and the interviews and the deskwork the analysis of the questionnaires, interviews and their combination with the documents and the bibliography. In my references the asterix indicates material, which had been, used for defining methods to measure the added value that SABIS® and in particular the ISF (Internationale Schule Frankfurt-Rhein-Main) offers to its students. The rest of the bibliography enabled me to take into consideration techniques and extend my horizon of research. The questionnaires, the interviews and the bibliography lead to the definition and possible existence of social and academic value provided by SABIS®. The documents were used in order to find methods to measure the added value.

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<sup>13</sup> Brügelmann, Hans 2004, „Standards vorgeben?“, in: Pädagogik 3/2004, 51 Doral, H., Drury, D. (January, 2003). 'The Value of Value- Added Analysis', National School Boards Association, 132-141. Doral, H., Drury, D. (January, 2003). 'The Value of Value- Added Analysis', National School Boards Association, 132-141. Greene, J. P. (Hoover Institution, Leland Stanford Junior University). (2002). 'The Business Model', 46-51 Herrmann, Ulrich 2003, „Bildungsstandards“ – Erwartungen und Bedingungen, Grenzen und Chancen, in ZP 5/2003, 625-637

I took into consideration the following disadvantages of the questionnaires and interviews:

- Bias due to poor questions.
- Response bias.
- Incomplete recollection of feedback.
- Reflexivity-interviewee expresses what interviewer wants to hear.

However, I believe that my previous experience in conducting research projects, my deep knowledge of the SABIS® system and my presentation skills helped me to avoid serious errors. Obviously, I had to study relevant bibliography, in order to make my approach more objective and global.

The existence of a variety of documents at ISF was an excellent tool for the conduct of my research. Records are kept on weekly basis; therefore I had in place a huge amount of data. I had to decide which of these documents should be used in order to have valid results.

For the analysis of the above data, I have used the model proposed by 'Grounded Theory'<sup>14</sup> (Barney Glaser, Anselm Strauss) and my mathematical background. The table below shows an outline of the model of the grounded theory I used:

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<sup>14</sup> Corbin, J., & Strauss, A.L. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3-21. Glaser, B.G., & Strauss, A.L. (1967). The discovery of grounded theory: Strategies for qualitative research. Strauss, A.L.(1987). Qualitative analysis for social scientists. New York: Cambridge Univ. Press Chicago: Aldine. Strauss, A.L., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage. Strauss, A.L., & Corbin, J. (1994). Grounded theory methodology: An overview. In N.K. Denzin & Y.S. Lincoln (Eds.), Handbook of qualitative research. Thousand Oaks, CA: Sage

Worksheet for Analyzing Use of Grounded Theory in Educational Research						
Subject Area	Guiding Principles (Glaser or Strauss)	Other Methods Used (Qualitative. or Quantitative.)	Constant Comparison	Theoretical Sampling	Coding	End Result

Grounded theory began with my research situation. Within that situation, my task as researcher was to understand what was happening. I did this through observation, conversation and interview. After data collection I noted down the key issues: this was what I called "note-taking". Constant comparison was the heart of the process. At first I compared interview (or other data) to interview (or other data). Theory emerged quickly. When it has begun to emerge I compared data to theory. The results of this comparison were written in the margin of the note taking as coding. My task was to identify categories (roughly equivalent to themes or variables) and their properties (in effect their sub-categories). As I was coding my information, certain theoretical propositions occurred to me. These were links between categories, or about a core category: a category, which appeared central to the study. As the categories and properties became apparent, they and their links to the core category provided the theory. As the data collection and coding precede the codes and the memos accumulated.

I tried to increase the diversity of my sample, searching for different properties. When my core category and its linked categories dried out; I no longer developed their properties. This was a sign that it was time to move to sorting. I was very careful to group my memos, and sequence them in such an order, which could make my theory clearest. The literature was continuously accessed as it became significant. Glaser makes the point that most research including qualitative research is hypothesis-testing. The order of the sorted memos provided me with the skeleton of my thesis. The grounded theory during my study worked through the following mostly-overlapping phases:

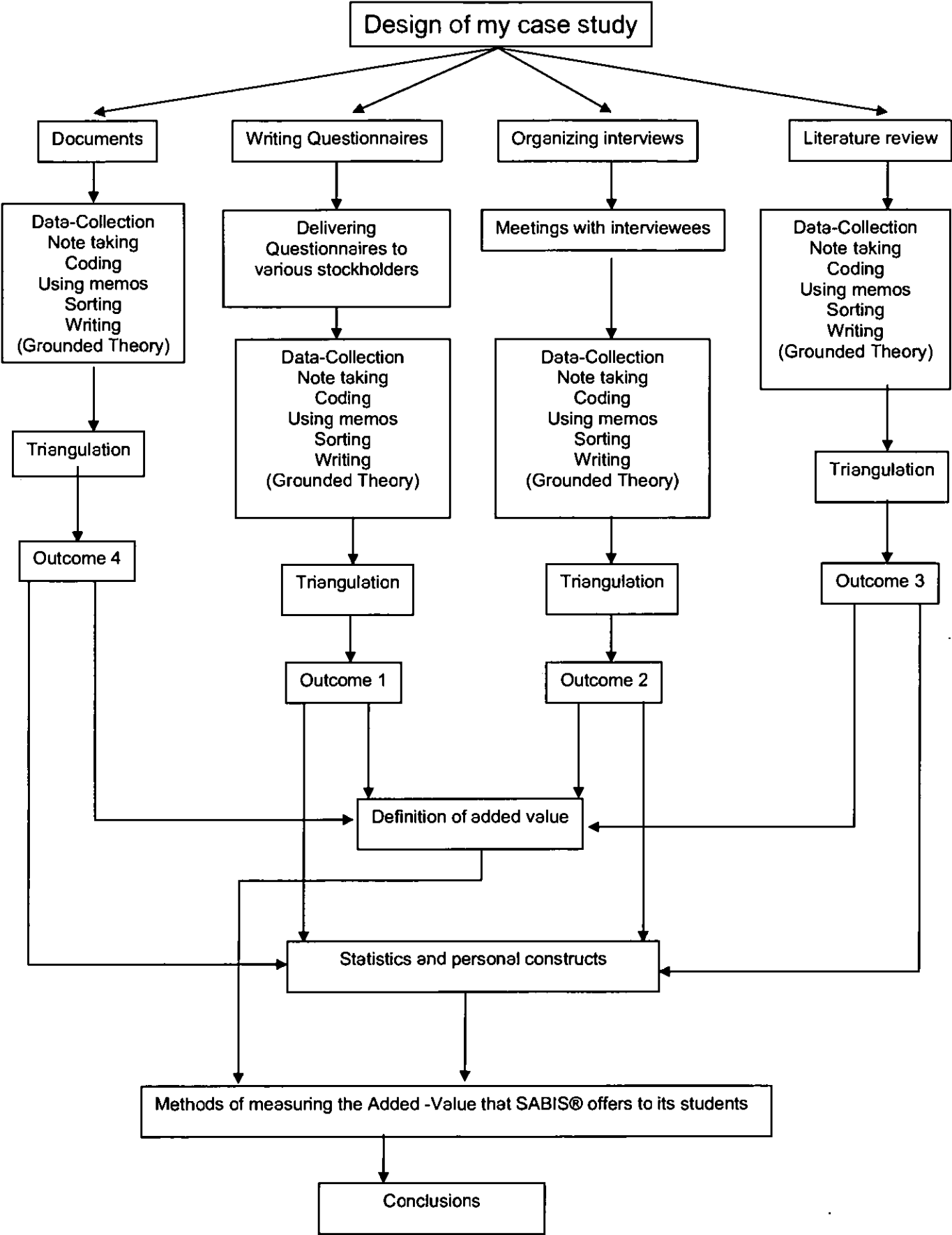
- Data-collection
- Note taking
- Coding
- Using memos
- Sorting
- Writing



In short, data collection, note taking, coding and memoing arise simultaneously from the beginning. Sorting started when I felt that all categories were saturated. I started writing after sorting. The theory is emergent, discovered in the data as Glaser used to say.

I am well aware of the discussions and criticism regarding the Grounded Theory. Lars Mjøset from the Department of Sociology and Human Geography of the University of Oslo presents the criticism coming from Goldthorpe as follows: 'The program of Grounded Theory allows successive modifications of the hypotheses formulated at the start of the process of empirical research. It does not rely on indicators and escapes the testing of theory.' Many scientists agree that the methodology's acceptability and practicability therefore needs to be more strongly established. This can be achieved by those using the method bringing their perspectives and reflections into the public research arena. I hope that my approach was in this direction.

As it is well known Statistics offer a range of methods for the detailed analysis of quantitative data. In my project, the data was both qualitative and quantitative; therefore I had to use personal constructs. One of the most interesting theories of personality to have emerged this century and one that has an increasing impact on educational research is the personal construct theory. Personal constructs are the basic units of analysis in a complete and formally stated theory of personality proposed by George Kelly. Finally, the development of methods of measuring the added value of the SABIS® system was the outcome of the above techniques. Knowing the level of difficulty of that task I further explored the bibliography and had tutorials with experts in software and statistics. The diagram below attempts to describe my research method:



# Chapter 4

## Activity of the project

My research started in January 2006 and included questionnaires, interviews, participation in seminars about statistics and software, selection of appropriate school documents, further study of bibliography and long discussions with those who read my first drafts.

Briefly, during January 2006 I prepared my questionnaires (see appendices) and I selected the sample of population to be distributed. From February to April 2006 I distributed my questionnaires, prepared the interviews, decided about the people to be interviewed, conducted the interviews and collected the feedback from the questionnaires. In May and June I analysed the findings from the interviews and questionnaires and studied relevant bibliography. During my summer break (July, August) I participated in seminars about basic principles in statistics and software<sup>15</sup> and started assessing and comparing the first findings from the interviews and questionnaires with those in the existing bibliography. At this stage I decided that I had to plan more interviews. After the completion of the second set of interviews I drafted the definition of the social and academic added value. I selected the appropriate school documents and studied further bibliography, checked the reliability/validity of my findings by using the method of triangulation. The statistical analysis of the school documents and the creation of personal constructs were completed by January 2007.

The sequence of interviews was of critical importance. After every meeting I had to prepare a summary of questions and answers and then I tried to find new elements. The process was of dynamic nature. For instance, my research derived by some elements that seemed to be very important at the outset of the process, in some cases, had to be replaced by anxious reconsideration in the wake of the input I got on their value added from subsequent meetings with people. Also in terms of procedure, I have tested new ideas that came out of a meeting also at subsequent discussions to gauge the degree of

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<sup>15</sup> Mr. Androvitsaneas who is the deputy Head for the statistics division in the ECB was my instructor.

support they may enjoy by others. When I had all the elements ready, I shared them with people I respect and then I made the appropriate changes.

It should be noted that one of the disadvantages of the meetings as a way of getting input for my research was that all people involved were very busy. Thus I had to prepare a schedule, which could fit with their free time. On the other hand it was obvious that because this project tried to define the added value of the SABIS® system and subsequently to measure it, all those who had managerial positions were reluctant to be objective. Hence I was prepared for not such a positive response at least from all of them.

More in particular, I have started the activity of my project with a questionnaire (see appendices 1, 2) distributed to members of the ISF (Internationale Schule Frankfurt-Rhein-Main) community (parents, teachers, students and staff) and a second one which was completed by potential customers of the school when they were contacting the Marketing department (see appendix 3).

Despite the fact that all were very busy during the school year, it was impressive that a considerable amount of people sent me feedback within the given time frame. However, most Heads of Departments and generally those who were members of the administration did not respond spontaneously to my request. I knew that the timing for that questionnaire was not the best since during January and February we were all overloaded because of the mock<sup>16</sup> exams. That's why I decided to postpone the contact with the members of the administration (all Heads of Departments, Coordinators, the Director and the Regional Director of the school) for later. I included those questions I found as the most important during the first level of my research. To note that due to the nature of my project (e.g. to collect new ideas of the current staff), I structured the questionnaire with open-ended questions that would allow gathering input that would be of value added. By contrast, I felt that by providing my own views and requesting a ticking approach for responses would significantly reduce the appetite for innovative input.

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<sup>16</sup> Practice exams where the students write past papers under strict conditions, identical to the real exam.

I must admit that every question itself could have been a subject of a project. However, I tried to gather as much feedback as I could from the side of the administration. Most of them requested at least one-week time to prepare their responses. As an element that may deserve being mentioned, somebody told me that if somebody could give accurate answers to those questions then that project could worth millions. Did that mean that my expectations were unrealistic? I assume that only after some years of application of new concepts deriving from my project could allow someone to answer that question.

I knew that this part of my research could take a lot of time because my questionnaire was probably the last issue in the list of their daily priorities. My first attempt was to send the questionnaire to all of them via e-mail. Then I tried to meet them during the school day and I asked them kindly to participate themselves for that research. Most of them reacted positively and promised to respond as soon as possible. I have to confess that a few of them denied giving me feedback saying that it is a personal project and they could not see how it could affect them. However, they said that they would appreciate receiving a copy of the final project as creative and useful readers. To me, this was empirical evidence to the value of the theory in the literature around 'resistance to change'. According to theory, it is many times difficult to introduce new applications in a system that has been working "efficiently" for a lot of years. However, my experience over my long period of teaching has shown that routine could stagnate creativity and progress. On the other hand, administrators sometimes consider cost-benefit elements in the short-run as important and thus sometimes in light of increasing "sunk costs" they fail to see the long-term benefits of such a project which tries to build in qualitative elements and improve the "atmosphere" in the school. More in general, the lack of support by some members of administration by not participating in my research could signal indifference mainly owing to lack of ample elements that may connect the project with increased earnings, lack of motivation as the progress was perceived as not directly associated with their career progress or simply resistance in being confronted with real problems. Of course, the aim of my project is not to emphasise on the underlying reasoning for the aforementioned negative stance by some members of the administration, however, their non-participation did not facilitate my research.

For the analysis of the feedback received from both questionnaires, I used the Grounded Theory (Barney Glaser, Anselm Strauss). The coding process involved breaking down, analysis, comparison, and categorization of the data.

In terms of organisation, I scheduled 25 interviews with an average duration of an hour per person (meeting). The interviewing procedure was indeed very helpful and let me draw some interesting lessons. For instance, as expected the interviews should be adjusted to the position of the interviewee. I found that for those with high-ranking positions in the administration, more effort was needed to make them answering some issues as, *inter alia*, they had less time available. Also, it came out of the procedure that some of them tried to impose their ideas or they were asking their own questions. I also found interesting the fact that people who are in a lower level of hierarchy are more open to discussion. All of them could devote more time than the one hour we had scheduled for the discussion. On the other hand, the feedback by some of them on the project seems to have been of less importance. Also, I noticed that some tried to present indirectly their personal complaints about the school. That made me thinking that I had to be an attentive listener, to avoid diverging much from the topic and to find alternative ways to get creative responses to my questions.

A special group of people I interviewed were the members of the parent network. The presence of the parent network at ISF is very dynamic. All members are females with a high level of education and considerably high financial background. They are actively involved in many activities of the school community like special events, organization of the library, sponsoring extra curricular activities, serving as a liaison with the German local community. Even though they monitor very closely the academic and social life in ISF, they have always a very supportive attitude towards the school. I scheduled the interviews with them very carefully; always after the school day because I wanted to make sure that I had enough time to discuss with them without the pressure of the daily routine. As I was expecting those interviews were very fruitful. All members of the parent network were responded enthusiastically to my invitation. They found the subject of my research very challenging not only for the ISF community but also generally for those parents who send their children to International Schools. It is worth mentioned that the majority of the families who send their children to our school stay in the area of Frankfurt for a short period of time (normally 2 to 3 years) and then they move to the

next destination where their career requires. The feedback from these mothers was important for an additional reason: ISF was not the first International School where their children were pupils. Therefore they had the possibility to compare different educational systems and be more experienced, thus more objective. Some arguments I found very interesting and led me to investigate their impact to my project were the following:

- The person who is responsible for recruiting people may add added value to the school if his choices are successful.
- More knowledge about history leads to a political opinion.
- A parent has to think carefully if ISF is the right school for his child, given that the expectations are considerably high especially in the field of mathematics.
- Decent family support is a key factor of added value of any educational system.
- Added value has only individual approach.
- For Americans the possibility for a second language defines added value.
- If we use the placement tests as a starting point in order to measure added value then the placement tests at ISF are not complete because with few exceptions there is no interview with the students, therefore the picture is not complete.
- Group work during and after class is core part of the SABIS® methodology. However for some students group work had been a hindrance.

A very important lesson to be drawn was related to the unpredictability of the input for the survey. I could not predict from whom the new ideas could come. In that context, people (e.g. members of the parent network) who were not expected to provide anything new surprised me and they gave me very innovative ideas, sometimes implicit to their answers. After filtering these responses, I was able to continue my research by adding new elements before the next interview.

A valuable source of information for the needs of my research was the alumni of the school. ISF is a school that operates 12 years in Frankfurt. Even though is a relatively new school, more than 100 students have already graduated from it. Given that I started working in this school 7 years ago the majority of those students were my ex-students and the good personal relation with all them was a decisive factor for their prompt response. Their written feedback was rich in experiences not only from the years they had spent in ISF as students but also from the reflection of this period over their studies and professional life.

A project about the added value of an educational system would be certainly incomplete if the current students did not contribute with their feedback, criticism and enthusiasm. Some adults think that nowadays teenagers are irresponsible, spoiled human beings with now particular interests and ambitions. What a naïve approach! After more than 25 years of involvement in education I have a huge material of evidence that teenagers are innovative, spontaneous, very capable and surely not indifferent neither immature. When I was designing the sequence of steps for my project I spent some time to decide which would be the correct momentum during the study to talk to some of our students. Firstly, I decided that the group of students who could give me more accumulated feedback were students from the upper primary to upper secondary. Secondly, I had chosen students from different nationalities, with different academic and social skills and abilities. I took into consideration how much time they had already spent in ISF. The discussion with them was full of surprises. For them it was a big opportunity to express their concerns but also to give mature, complete, creative views. It is important for the objectivity of the project to mention that I have used the triangulation method to assure validity. The meetings with individual students or group of them were organised during different time periods. This scheme facilitated my work and supported the objectivity of the final product.



As I mentioned several times one of the sensitive factors in an International School is the mobility of the students from one place to another quite often. However, one of the achievements of the teaching staff in ISF is the maintenance of very good contacts with ex-students. Some of them even though they choose to continue their school career in Frankfurt but in a different school come and visit us quite often. Their comments are not always positive about the time they had spent with us. However, a research earns feedback from every source even the most negative. In my case the students who agreed to send me written or verbal feedback gave me ideas about components I did not have thought before.

In ISF the customers talk to the Marketing Department before they decide if they would like to enrol their children to the school. This International School is maybe the exception to the rule given that about 40% of his customers pay the fees themselves, when in the majority of the International School nearly every family has the tuition fees as a part of a professional package. For my project this situation was of exceptional importance. The reason was that those potential customers could give immediate feedback through a questionnaire (see appendices 2, 3) having not only experience of other International Schools but also of the German public educational system which has a very good reputation worldwide. This data was the incentive for some interesting thoughts regarding the relation of the market and the standards in education. The main question that was raised for me as a researcher was: should we define the added value socially and academically in a way that reflects the today needs of a society that has the educational and financial background to support education of high quality by following the standards set by businessmen or education should prepare the students for their life and teach them values? Is there any contraction between those two approaches? Do the goals set by the marketing have a positive influence to the development of the educational system offered and designed by SABIS®?

The last two steps of that part of my research included important meetings: firstly with the Co-ordinators of the school and secondly with the Director of the school.

I met the Coordinators after having interviewed all Department Heads. I had prepared a questionnaire, which included, as usual, my initial questions but also issues brought by other people, which I found interesting. Given that in the past they were working as a

teachers their views were of critical importance. They were those who surprised me because they did not use the “dry” language of administrators. Before answering my questions, they had done a small research themselves about the definition of the added value in education. They gave me some related articles and also their ideas about issues related to the measurement of the added value of SABIS® that could be implemented beyond a short period of time. These meetings lasted about 2 hours although they were scheduled for only one and I felt that significant members of the administration were ready to support new ideas and strategies for the improvement of the school-life.

When I started the project I was hoping that it would have an inter- SABIS® utilisation. This proved to be a realistic assumption. Even though, it was not feasible to utilise the experience of other SABIS® schools because I financed the project and, therefore, I could not persuade colleagues from the various SABIS® schools around the world that it intended to be of help to all employees of the Organisation as a whole. However, it should be noted that the 41 schools of the SABIS® network function mainly in Middle – East, few in the United States and 2 in Germany. Obviously, the cultural differences among the different staff but also the locals who attend those schools are remarkable. However, a value added will still be attained for the wider SABIS® administration as the owners of the school could use that project occasionally. As regards the outcome of my project, the fact that my research focused on one school operating in Germany was a positive development. It should have been very complicated for me to draw up a compromising project by consolidating much dispersed views, which reflect different cultural elements. Also, given that I have been working in Europe and I am also influenced by developments in other advanced countries (USA) maybe I may have not been interested or appropriate to write a project concerning schools whose schedules are inevitably fine-tuned to methods, procedures and cultural elements be found or applied to Asia or Africa. Nevertheless, in my opinion this is not finally a weak point of my research but out of any question it would be value added if such a project were to be extended for instance if it would be elaborated by an Association of International Schools, particularly in Frankfurt. To avoid confusion, I would like to mention that the methods of instruction and the material taught is almost the same in every private SABIS® School. In that respect the outcomes of my thesis are expected to be a useful tool for the education in general and will help the discussion about better standards.

A serious obstacle I faced during that project was the fact that even though I tried to contact the other International Schools in Frankfurt there was no satisfactory response. I assume that it happened because they are operating in a very competitive environment, since the school fees are about the same and they are receiving enrolments from the same “population” of students. However, the cross-fertilisation of such a project could be beneficial in a longer term by every International School in the particular area where the school I work for is located. This is because after the introduction of the Euro, Frankfurt is becoming stronger international centre as hosting European institutions and the English language is gaining momentum as the main language for business and education. In addition, the increasing financial wealth would in the longer term allow more and more German parents to be able to financially support their children for education in an International School. This is complemented by the introduction of a law in Germany, which, starting from 2002 allows for international education of German citizens without any obstacles and, in addition, provides for some tax benefits as fees are partly recognised as tax-deductible items.

In SABIS® a researcher has the advantage to have in his disposition a large amount of raw data. That data includes results of Placement tests, weekly tests in various subjects, detailed daily records of attendance of the students and their infractions as they are reported by the teachers, academic results of external exams (e.g. IGCSE, A-Levels, AP) and records of the SLO™ (SABIS Student Life Organization®) where the researcher can find information about the specific breakdown of the activities of the students. It was one of the most difficult tasks for me to decide which documents were the most appropriate for me to use without violating the objectivity and the validity of the project. In the next chapter the reader will have the opportunity to assess if my choices were appropriate.

As Mathematician I was very keen in using some mathematical theory in my project. I studied different models I found in the bibliography proposed by economists and sociologists. I decided that a very sophisticated mathematical approach would exclude the big mass of those educators who probably in the future would be interested in studying my findings. Having the above in my mind I tried to use mathematics wherever it was absolutely necessary. Knowing that in some fields like in economics, the mathematical models give only some kind of prediction, not necessarily accurate, I defined my variables in a simple and clear way and attempted to measure the added

value precisely in that respect. In Statistics I found also basic tools that assure the validity of my results. At this stage I have to mention that some of the most interesting personal constructs I used were a mixture of mathematics and statistics.

The above brief activity of my project would not have been possible if I did not have study the Grounded theory. My goal was the same as the grounded theory: to formulate hypotheses based on conceptual ideas. The questions I kept on asking were: 'what is going on?' and 'what is the main problem of the participants and how are they trying to solve it? Following the Grounded theory I did not aim for the 'truth' but to conceptualise what was going on by using empirical data. I am aware of the fact that the application of the Grounded Theory is very complicated and demanding. My audience will judge if I was successful in its application.

Triangulation is a process of building theory from multiple paradigms and layers. The triangulation-thinking model comprises three sides with three sets of lines denoting that three layers of triangulation can take place along three sides. The image appears to twist and turn when viewed from various perspectives. A major application of the triangulation thinking approach is research validity. In this instance, I use triangulation in an interpretive analysis to accomplish research validity. Interpretation of the data collected from the subjects of the inquiry is open to bias when not triangulated. I used triangulation to apply three distinctly different approaches to data collection and analysis of the findings (existing studies, the literature, and the input from a group of participants), contributing strength to my conclusions. Whereas the data was collected from three different sources, each was examined under a scientific approach. By using three different sources for data collection and analysis I "triangulated the results," contributing validity to the findings.

# Chapter 5

## Results of the project

### 5.1 List of Participants in the project

#### 5.1.1 Questionnaires

NAMES	NUMBER OF DISTRIBUTED	NUMBER OF EVALUATED
ISF STAFF	85	38
ISR STAFF <sup>17</sup>	25	11
SABIS® ADMINISTRATORS	18	14
PARENT NETWORK	70	36
STUDENTS FROM GRADES 11, 12, 13	70	50
STUDENTS WHO GRADUATED FROM ISF	20	12
STUDENTS WHO LEFT ISF	15	8
COLLEAGUES WHO LEFT ISF	15	5
NEW CUSTOMERS (MARKETING)	100	53
<b>TOTAL</b>	<b>410</b>	<b>227</b>

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<sup>17</sup> ISR: Internationale Schule am Rhein in Neuss, *Member of the SABIS® School Network.*

### 5.1.2 Interviews

NAMES	NUMBER OF PEOPLE
DIRECTOR OF ISF	1
PRESIDENT OF THE PARENT NETWORK OF ISF	1
MEMBERS OF THE PARENT NETWORK OF ISF	5
MEMBERS OF STAFF OF OTHER INTERNATIONAL SCHOOLS	4
SLO™ COORDINATOR	1
STUDENT MANAGEMENT OFFICE COORDINATOR	1
HEAD OF ENGLISH	1
HEAD OF GERMAN	1
HEAD OF IT	1
HEAD OF MARKETING	1
HEAD OF SCIENCES	1
<b>TOTAL</b>	<b>18</b>

## **5.2 Feedback from questionnaires**

The questions described in the sections 5.2.1 to 5.2.6 were addressed to the chosen sample of population (see table 5.1.1). The bullet points have been used to present the collected feedback.

### **5.2.1 ISF was chosen by parents and/or students and not another school for the following reasons:**

- ISF offers better education than the German educational system.
- The diverse community contributes positively to the development of the students.
- Motivated and strong academically student body.
- Opens the door to any institution of higher education in the world.
- Learning weaknesses of children can be discovered at an early stage.
- Individual additional support to students.
- Collaborative working is encouraged.
- Good relationship between teacher and student.
- Convincing academic results given that grading of students is independent from instructors.
- The structured system used makes evaluation easy.
- Instruction is in English. This will give to the students a wide range of opportunities for professional development.
- At ISF emphasis is given on academics (building high-level skills in languages and Mathematics).
- Existent track of successful academic results.
- Placement of the students is made by what they are ready to learn and not according to their age. The system is not selective.
- The SLO™ program helps the children to feel that they have ownership of the school.
- A private school has snob- appeal and often is the first choice of wealthy people.

- The well-structured breakdowns give no possibility for any teacher to fall behind.
- The facilities offer a wide range of extracurricular possibilities for in school and after school activities.
- Generally small advanced placement classes are offered.
- Family connections with other members of the ISF community.
- Vast range of academic support.
- Project work and oral participation is not part of the SABIS® system. This benefits students who are bright but may not have the social skills or are too shy to get involved in class.
- Disciplined, peaceful environment. There are no records of incidents of violence, criminality, drugs or bullying.



### **5.2.2 Do you think that the new students have a smooth integration into ISF?**

- SABIS Student Life Organization® (SABIS® SLO™) does its best to guarantee a smooth integration. Through SLO™ get involved immediately in responsibilities and activities.
- ISF is a small community and it is hard for a totally new person to integrate.
- It depends on the academic background of the student.
- Teachers create a supportive environment. They show great understanding.
- Nationality plays a role.
- The intensive courses in English, mathematics and German help them to integrate.
- The ISF students are used to be ambassadors for the new students and are very helpful.
- Entering ISF at a higher grade/ age becomes more difficult than joining at an early age.
- The students do not feel bored or over challenged. This factor facilitates their integration to ISF.
- If there is an integration problem, it is due to the students' lack of initiative and inflexibility.
- Parents are advised of the gaps, the subject teachers are informed by the Department Heads about those gaps.
- SLO™ helps the students by organising tutoring and study groups.
- The different teaching method at ISF is considered as a major factor of a non-smooth integration of the new students.
- For some students the strict and compelled learning experience is too much to handle.
- The teaching staff needs to keep an eye on every new student.

### **5.2.3 Placement tests: Is their importance social only, academic only, both? Why?**

- The placement test focuses on a student's academic ability only.
- The emotional maturity is not taken into consideration.
- The placement test does not investigate if a candidate faces social problems. Only the transcripts from his previous school are taken into consideration.
- The math terminology is a problem for non-native speakers.
- Any kind of social selection should not be encouraged.
- Social evaluation is not really measurable so early and with a few questions.
- Those who are dealing with the child directly like the teachers and parents could deal with the social placement of the student.
- Last point of reference is the age.
- The placement tests have such a wide range of variation in results to be of questionable value altogether.
- An interview process may be more helpful rather than a placement test, as this will be able to identify a student's social and communicational skills.
- Placement according to the ability of the students helps them to cope with their classmates.
- New students need to know what options (e.g. courses, external exams) are available.
- Depends on the grade level.
- Social conditions are more important for younger children
- For upper grades proper academic placement would be much more important especially considering the emphasis on external exams.
- Age is a very important factor, especially if a child is older than his peers.
- Academic evaluation is not always a mirror to a child's knowledge.

#### **5.2.4 ISF believes that SLO™ offers added value to the students. Do you agree? Why?**

- There are many ways the students can get involved, ranging from being member of an activity to being a prefect within SLO™ activity.
- Teaching students leadership skills and how to work in a team are some of SLO™'s main attributes.
- In the future, when students need to get a job, they know they will not get paid if they do not work.
- SLO™ gives the students the opportunity to learn things that they might otherwise never have exposure to.
- SLO™ makes the students responsible.
- SLO™ could be more efficient.
- Development of social skills.
- Important for new students from abroad who don't have friends in their neighbourhood.
- It is in the students' hands to start a new activity, organize a community service project, etc.
- It helps students to gain confidence, leadership skills, and a healthy amount of discipline, which is not only important for their academic, careers, but also for life in general.
- SLO™ offers independence.
- For example the tennis team may get students involved in leadership.
- Management gave to students a connection to the school outside academics.
- Students get to talk to each other; SLO™ improves their language skills.
- The students feel that they have ownership of the school.
- SLO™ could be more expansive.
- The activities bring the students and the teachers closer and break the barrier of the student-teacher tense relationship, which some schools have.
- SLO™ is not always able to be interactive enough to attract the attention of the students.
- This area is a good training.

- Some students do not use the time to pursue the assigned or selected activity and prefer to chat and socialize.
- SLO™ is a nice break from very intensive academic activities.
- Some activities do not appear well organised or well supervised. Students are sitting doing nothing or simply wandering.
- For the little ones is not so good sometimes. If the leaders are not efficient and well trained the activities bring nothing to the students.
- Students learn how to teach students.

#### **5.2.5 ISF believes that group work offers added value to the students. Do you agree? Why?**

- Students learn to accept that other people have different opinions.
- The students learn to work in a team.
- Some students see it as an opportunity to sit back and let others to work for them.
- They do not learn to think for themselves, which in exam situations can lead to students getting stuck on more challenging questions.
- The group work can be good but should be limited.
- It is good for students to work individually as well.
- Group work for big projects is ideal.
- Group work definitely offers added value to the students. It only needs to be encouraged by the curriculum.
- Through peer-work children learn to develop stronger communication skills and are less centred 'teacher environment situation'.
- Through peer-work students develop a positive challenge in collaborative problem solving skills.
- For some students group work is not the favourite way of learning.
- By doing group work, students improve their language skills.
- Stronger students take on leadership positions.
- It makes learning more active, participatory.

- Weaker students get help while the teacher is still available for explanations.
- Group work is the way the world works.
- It has to be assessed by the teacher when and how it will be effective.
- It is a great tool in discussions in project work.
- Group work is one of the key ingredients in the shaping of a student's mind.
- In the process of the higher education the art of communicating and working with others is far more important than actually being able to comprehend the subject itself.
- It is important to differentiate group work in the language and science areas.
- It is essential that students discuss a topic, to exchange opinions. Lately, the English department has tested having a group composed by two stronger and two weaker writes write one essay as a group. The resulting essays from those groups were better than the essays written by the weaker as well as the stronger students.
- Group work is definitely an educational experience to learn the art of compromise.
- Group work should be a mean to achieve an end (mastery of concepts).
- There are many circumstances in which group work is without value; e.g. classes without students with leadership skills, classes in which student ability is poor.
- ISF should not advertise group work so strongly.
- The teachers need training in order to implement group work.
- Often it is more effective when students explain things to each other.

### **5.2.6 Name the most important factors that will define added value for a student.**

- Cultural events held at ISF that show students different traditions from around the world.
- Sports tournaments promote a healthy competitive spirit amongst students.
- Events, such as the Sommerfest<sup>18</sup>, which attract all levels of the school and have activities for everyone boost school spirit and allow classmates to interact outside of the school hours.
- In an International School, students meet peers from many different cultures and religions. At a young age, students become tolerant of different cultures.
- The school has a university / career advisor who helps students plan what is necessary for their future endeavours.
- The students need to feel that they belong to the school, they are accepted by others and feel welcome, acknowledged, and they are part of something.
- Strict discipline and coherence in discipline.
- More field trips would reinforce the social added value for the students.
- Possibility to work together, to help the others and develop friendships.
- The safe and peaceful community.
- Being taught by devoted teachers.
- Everybody speaks more than one language, therefore has the ability to communicate now and later with a lot of people.
- Immediate problem solving feedback.
- Positive reinforcement and individual fostering.
- The class size was never big in ISF and that creates a nice learning environment.
- Through the school program the student has the possibility to discover talent and capabilities.
- Focus on continuation in higher education.
- The school offers excellent facilities to support extracurricular activities.
- The teachers have a good background and know how to communicate the topics to students in a clear way.

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<sup>18</sup> The school community welcomes the summer by organizing performances, international cuisine, various competitions, charity events and many more.

- The various external exams offered by ISF allow students to choose which subjects they wish to take.
- The library is a place where students can get books they may not have access to at home. Non-native English speakers can benefit by reading books in English they choose to, rather than a book they must read in class.
- Academically, the students need to see that they are capable of learning, that what they learn has value and will be of importance later in life, which they feel motivated and encouraged to learn, but not shunned when they ask questions or have difficulty learning.
- The frequent testing is not a positive experience for all students. Some of them have stress and panic attacks.
- It is important for a school to offer a variety of academic branches because the student has the possibility to develop his areas of interest.
- The relationship between teachers and students is very important. The students must feel that they could always talk to teachers and would receive help.
- The senior students should not be treated as the younger ones because they do not have enough experience of how to handle independence when they go to University.
- It is crucial for a school to give emphasis on reading and writing.
- SABIS® philosophy to help the student in need; e.g. study buddies.
- For math and languages different levels of the same course are offered.
- Ability to work independently.
- Ability to conduct experimental work.
- Ability to critically analyse experimental work (interpret data, identify weaknesses)
- Ability to apply quantitative techniques to science problems.
- It is important to place a student in the right grade level, to reward excellence, to support weaknesses, to motivate positively.

### **5.2.7 In which areas should ISF improve in order to increase the added value for the students?**

- Creating friendly competitions within the school community can increase social added value.
- Some students are in a grade that is too tough for them. Then they are placed in numerous study groups and the pressure on students builds. Although some of them respond well to extra academic help, in some cases it may be in the student's best interest to repeat the year.
- Allowing parents direct access to teachers would also benefit the students. Parents would learn more about how to help their child compared to hearing from the coordinator.
- There are no science labs and the information the students learn is all book knowledge. When students are studying science and math, both practice and theory are important. Students need to be able to learn the information, as well as see how it is applied in the real world. When learning a foreign language, the student needs to be learning how to use the language in a real setting.
- The discipline has to be consistent in both primary and secondary.
- The professional development of the staff will increase the quality of teaching and the period of time the teachers stay in ISF.
- The library should not be so noisy in order to help the school community work in various projects.
- More creativity and freedom would facilitate the instruction.
- The school is more oriented towards younger students in activities and events. This is a disadvantage for older students.
- The use of Internet should be increased as a research tool.
- ISF community has to make sure that delivers all the possible benefits that SABIS® has available.
- The school could design special classes for slow, learning disabled or special need students.
- The frequent move of teachers should be avoided. More incentives should be given to those who would like to stay.



- Students should be promoted to read more and in turn discuss on this. Consequently as students leave the school, they have been equipped with knowledge of what is going on outside the school's walls, as well as with high communication skills.
- The development of a stronger emphasis on analysis and critical reading will offer a broader range of possibilities for the students.
- It is important for the school to focus on students' skills and their ability to speak, present and debate.
- The ISF community by showing respect and appreciation for teachers and the work they do increase their enthusiasm. As a result the community works better and the students achieve better results.
- The test items should not be poorly constructed or emphasize trivial concepts.
- The content of the curricula must be well presented and be updated.
- The assignment of students to courses is very important. If some students are unqualified for classes, then the instruction becomes poorer.
- Less testing and more time for teaching would help the teachers to improve the level of the weaker students.

### **5.3 Feedback from the interviews**

The questions described in the sections 5.3.1 to 5.3.6 were addressed to the chosen sample of population (see table 5.1.2). The bullet points have been used to present the collected feedback.

#### **5.3.1 The components that define precisely the added-value in education:**

- The added value is both academic and social. The SABIS Student Life Organization® program reinforces both components.
- Measuring the added value is very subjective. For example a student who has as average 14 out of 20 in grade 7 and maintains this grade sometimes learns more than expected.
- The choice of favourite subjects by a student may increase the added value the system offers.
- The personality, the experience and the teaching skills of the teaching staff are of crucial importance. They are able to offer insight not covered on any pacing chart, lesson plan or book.
- The SABIS® methodology increases the self-confidence of the students. All students are encouraged not to give up.
- The added value comes when the teachers step outside the set system and give the extra assignments required in order to fill the gaps their students have.
- Individual help is a very important component of the added value of an educational system.
- Learning to appreciate other cultures is an important factor of the added value in education.
- Given that every student spends a considerable amount of time in his school, it is very important that that place is fun. That happens because of the teachers when they are very motivating.

- The basic subjects of the SABIS® curriculum are the languages and mathematics. The system offers structure, has methods to fill the gaps and there is mixed ability teaching (individual and group work). Especially for teenagers the framework given leads to higher responsibility. However, the discipline system should be designed to have a more positive approach.
- For some nationalities like the Americans the fact that the children learn and practice at least three languages is a huge benefit and for some parents defines a huge added value for the career of their children.
- During the academic year 2005-2006 the SLO™ program in ISF had 92 students as prefects. The students who participate in this program learn to handle leadership and be responsible. Everyone has certain tasks on daily basis. It is important that SLO™ positions are not elective but volunteer. The newcomers have a special treatment through the ambassadors and the Big Brother, Big Sister program.
- The activities where students are involved give them points for their university applications.
- The school is not always successful in integrating all its students to the different activities. Those students, who are not sociable, are isolated in the school community, since the SLO™ program is not mandatory for grades 10 through 12.

### **5.3.2 Factors that guarantee that added value will be gained by a student**

- The attitude towards learning of both students and teachers is vital.
- The continuous monitoring system gives feedback to both parents and teachers from the first week the student joins a SABIS® school.
- The person who is responsible for recruitment may add added value to any educational system. The quality of the teaching staff is one of the most important factors for a successful school. The students learn more if they respect their teachers.
- SLO™ (SABIS Student Life Organization®) puts responsibility on students and train them in managing people and resources.
- A structured system like SABIS® assures good results in external exams (e.g. IGCSE, A- Levels, AP) but indirectly stops creativity.
- The homeroom teachers must carry out a pastoral role.
- The ratio teachers & students affect the quality of the education.
- The types of extracurricular activities could be the catalysers for the positive energy and the talents of the students and the staff.
- The History courses offered develop and influence dramatically the political orientation of the young people.
- The SABIS® is designed to minimise the differences between teachers (e.g. in the primary school there are different teachers for different subjects). Accountability is given to all teachers.
- The diversity of nationalities in the school community guaranties the development of the appreciation of other cultures. It is a factor reinforced by the school community as a whole via extra curricular activities and critical thinking.
- The after school activities have a significant role and undoubtedly offer added value for working parents. The students have a safe and creative environment to spend some time till their parents are available to take them home.
- 40% of the students are Germans. The school offers 4 different levels for the German language. This is an attractive point for German customers.

- The school accepts students with no English till grade 4 (9 years old students). There is an intensive English program for those students. The benefit is considerable because they have the opportunity to learn another language and use it as native speakers even though they did not join the school earlier.

### **5.3.3 Appropriate time for measuring added value**

- Every educational system is evaluated from day 1 according to some parents.
- The families who join ISF and were in the German educational system before need more time to get an overview of the school. Their involvement in the parent network is crucial. They need about a year before they start measuring the added value for their children.
- There is always a period of adjustment different for every student. However, the amount of time needed for this adjustment will be evaluated at a later stage by the family and the student as it shows how flexible and welcoming was the new environment.
- For students who are coming from very structured system like the Korean, the families are used to a lot of procedures followed by SABIS®. Therefore the amount of time needed for measuring the added value is very short. However, those students who are coming from a loose system they need a lot more time.
- In cases where students have a bad report from their previous school ISF does not reject them. According to SABIS® policy and philosophy schools cannot be selective but have to offer a new opportunity to students under the correct guidance. However, in cases where the student does not respond to those efforts there are consequences.

### **5.3.4 Checkpoints for assessment that the school offers added value to its students**

- The parents have on daily basis feedback from their children about their school life.
- The results that come home are important checkpoints for the families.
- The parents assess the maturity and the social skills developed by their children.
- The homework diaries are very good tools for the parents to check the material that was covered in class and the homework assignments. They also show the timeline for the various subjects.
- The coordinators have a very active role in the arrangements for extra help for the weaker students.
- The social life of the children outside the school gives also feedback to their families about the profile of the school and the values that are promoted. A good sign for a lot of parents are the new friends who made their child feeling welcome to the new school.
- Art and music are areas not very much developed but for some students are very important checkpoints of the added value since this is their favourite field.
- The progress of the pupils is boosted considerably by the encouragement of the teachers. A lot of academic and social problems find more easily a solution if there is communication between the teacher and the student. The open discussions, the freedom in the classroom, the continuous interaction between students and adults and the mutual respect assure a better relationship and lead to a better community.
- Some parents believe that any type of behaviour is a sign that the children are learning something.
- If the added value is measured exclusively on scores then the researcher needs to take into consideration the standards of the curriculum. In the case of an International School these standards could vary considerably. However, the universities have in place assessment tools that could be possibly considered as a valuable source of information. More in details the entrance requirements of the top universities establish the high standards a school has to maintain in order to have some of its students in those institutions of higher education.

- The classes with big number of students (more than 20) are not attractive for a lot of parents, especially Germans.
- Very young students (e.g. kindergarten) start speaking English and German after a few weeks in ISF.

### **5.3.5 Added value for under performing students**

- The SABIS® methodology is ideal for learning.
- The extra help is easily accessible in ISF. When a student has difficulties in one or more subjects then the academic coordinator with the assistance of the Student Life management office arrange for extra help, offered by a stronger student or a teacher. Outside the SABIS® system private tutoring is frequently the only way for getting extra help.
- Some parents think that a really weak student has no chance to stay at ISF. The parents have to think carefully which school is appropriate for their children.
- In the majority of the cases the classes have a relatively small number of students. It looks that this is an advantage especially for the non-average students because they have more attention on individual basis from their teachers.
- The under performing students should and probably do know where are the gaps. The school has to give them the appropriate tools to help them to overpass the obstacles they face.
- The students have frequent testing and so they loose the fear about exams, develop good study habits. According to the feedback given by students who graduated this was a benefit for the University studies.

### **5.3.6 Additional comments**

- It is important that when an outstanding student joins ISF does not feel bored. Outstanding students may belong to both categories: socially and/or academically peak students. It is important for the school community to take the time to challenge them more. Some of them skip a grade and others have the possibility to go beyond the school usual routine. For example the various facilities e.g. theatre gave in the past to gifted students the stage for their own performance. The experience shows that those students contribute very positively to the life of the school and learn how to work together with others who have different levels of ability. The character and the maturity of such a student will also determine if ISF is the correct place. The teachers could play a key role in the development of an outstanding student by assigning extra homework, giving him extra responsibilities. Experience shows that some teachers follow patterns that have a great impact on children's learning.
- The involvement of students in the SABIS Student Life Organization® program requires maturity. Therefore even if a student has lower grades than in the past this participation is considered as a step ahead for the growth of his personality.
- The records of infractions taken by the SMO (Student Management Office) are crucial for the assessment of the added value that ISF offers to its students. In case that the number of infractions decreases the student shows clear improvement.
- The participation in every aspect of the school life needs to be reflective. This process contributes to the increase of the added value of every educational system.
- The students who face learning disabilities are treated fairly well in ISF in comparison to the German educational system. They do not loose their self-esteem. The Student Management Office looks very effective and is doing a good job with those students.
- The school has the mission to help every student to find its talents and push him in the correct direction.
- Sometimes the SABIS® system looks contradictory: on the one hand the students are taught how to be responsible and independent and on the other hand the teachers spoon-feed them a lot.



- The attendance is taken in every grade level every period. The parents/guardians have immediate feedback about the attendance of their children and accidents may be avoided.
- The school offers a web-site with information about the academic performance of the students and their number of infractions. As a result the parents are well informed and can work closely with the school in order to monitor better the performance of their children.
- The workshops for parents organised by different people have an indirect added value for the students. These interactive discussions give information but also practical solutions to the parents.
- A student with decent family support can get to a very good standard no matter in which educational system is.
- In the ISF all students are wealthy. They have huge financial support. This is a very important added value. The companies pay expensive fees expecting that the students will have a very high level of education.
- For some students the big amount of tests is a source of stress and pressure.

## **5.4 Feedback from potential customers**

The questions described in the sections 5.4.1 to 5.4.5 were addressed to the chosen sample of population (see table 5.1.1, new customers who visited the Marketing Department of ISF during a certain period of my research). The bullet points have been used to present the collected feedback. The Diagrams following each group of answers give quantitative analysis of my findings. Some customers chose more than one reason/factor.

### **5.4.1 Which are the most important reasons for which you have decided to enrol your child to an International School?**

- The education provided is of higher standards than the German Education system.
- The members of the family have different cultural backgrounds.
- There was no better choice. The family just moved to Germany from abroad.
- The international education was chosen because is paid by the company where one of the guardians works.
- The parents believe that the International School will offer added value to the education of their child.
- International School can provide diversity of culture
- The students always benefit from the sound learning and social environment.
- Full time school is a great facility when both parents work.
- The school offers English classes.
- Some parents have personal experience of international education.

**Which are the three most important reasons for which you have decided to enroll your child to an International School?**

	Number of Answers	Percentage
1. The education provided is of higher standards than the German Education system	33	24.4%
2. The members of your family have different cultural backgrounds	15	11.1%
3. You have no better choice. You just moved to Germany from abroad	12	8.9%
4. You have chosen the international education because is paid by the company where one of the guardians works	15	11.1%
5. You believe that the International School will offer added value to the education of your child	36	26.7%
6. International School can provide diversity of culture	6	4.4%
7. Sound learning and social environment	6	4.4%
8. Full time school	6	4.4%
9. The school offers English classes	3	2.2%
10. Personal experience of international education	3	2.2%
<b>TOTAL</b>	<b>135</b>	

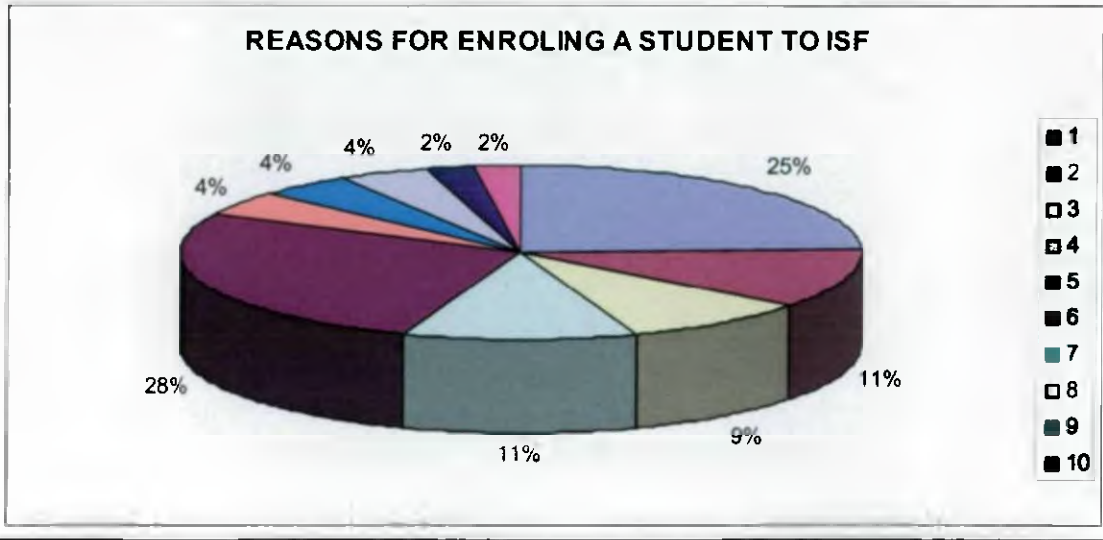


DIAGRAM 1

**5.4.2 ISF operates for 10 years. Please choose the three more significant factors for which you feel that ISF will be a good choice for your child.**

- The excellent academic results are very attractive.
- The newcomers are smoothly integrated.
- The staff is dedicated, experienced and hard working.
- SABIS® where ISF belongs offers a unique educational approach and continuous assessment.
- SABIS Student Life Organization® enhances the ability of students academically and socially.
- The school has earned a very good reputation.
- No severe discipline problems exist.
- The school offers sport facilities of very high standards.
- Well structured class of German
- Both GCSE and IB are offered.
- European, not American focus.
- Full day school
- International environment.
- English is the daily language.

**ISF operates for 10 years. Please choose the three more significant factors for which you feel that ISF will be a good choice for your child**

	Number of Answers	Percentage
1. Excellent academic results	30	16%
2. Smooth integration of newcomers	21	11%
3. Dedicated, experienced and hard working staff	24	13%
4. SABIS® where ISF belongs, offers a unique educational approach and continuous assessment	18	10%
5. SABIS Student Life Organization® enhances the ability of students academically and socially.	21	11%
6. The school has earned a very good reputation	31	17%
7. No severe discipline problems exist	6	3%
8. The school offers sport facilities of very high standards	15	8%
9. Well structured class of German	3	2%
10. Both GCSE and IB are offered	3	2%
11. European , not American focus	3	2%
12. Full day school	3	2%
13. International environments	3	2%
14. English is the daily language	3	2%
<b>TOTAL</b>	<b>184</b>	

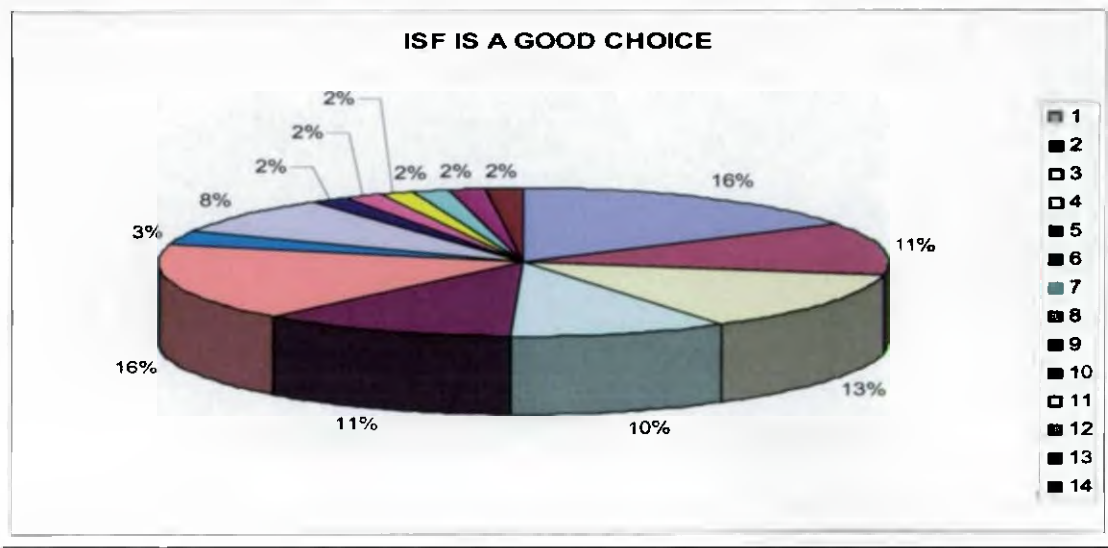


DIAGRAM 2

**5.4.3 Choose the most important actors, which in your opinion develop the social added value for a student during the school day.**

- The diverse community and the support of the school for international understanding.
- The safe and peaceful school community.
- Group work.
- Reinforcement of student's creativity.
- Good relationship between teachers and students.
- Improvement of Leadership and Communication skills.
- Discovery of talents and capabilities.
- The involvement of a student in SABIS Student Life Organization®.
- The various courses contribute to the exploration of life skills, truths, values and new perspectives.

Choose the five most important factors, which in your opinion develop the social added value for a student during the school day.

	Number of Answers	Percentage
1. The diverse community and the support of the school for international understanding	30	14.6%
2. The safe and peaceful school community	20	9.7%
3. Group work	22	10.7%
4. Reinforcement of student’s creativity	24	11.7%
5. Good relationship between teachers and students	22	10.7%
6. Improvement of Leadership and Communication skills	22	10.7%
7. Discovery of talents and capabilities	30	14.6%
8. The involvement of a student in SABIS Student Life Organization®	4	1.9%
9. The various courses contribute to the exploration of life skills, truths, values and new perspectives	32	15.5%
<b>TOTAL</b>	<b>206</b>	

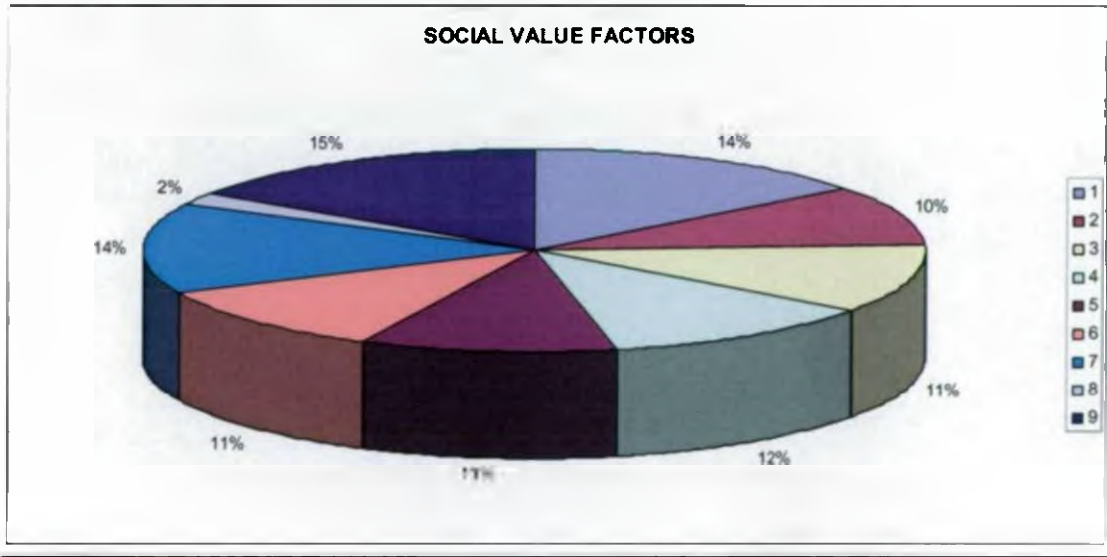


DIAGRAM 3

**5.4.4 Choose the five most important factors, which in your opinion influence the academic added value for a student.**

- Individual fostering
- Immediate problem solving feedback
- Regular testing
- Class size
- University Counselling
- Language skills.
- Focus on continuation to Higher education
- Competence and engagement of international teachers.
- The students feel challenged.
- All scores of exams count.
- Extracurricular activities.
- Well rounded curriculum



Choose the five most important factors, which in your opinion influence the academic added value for a student.

	Number of Answers	Percentage
1. Individual fostering	32	18%
2. Immediate problem solving feedback	<del>20</del>	11%
3. Regular testing	12	7%
4. Class size	14	8%
5. University Counseling	1	1%
6. Language skills	40	22%
7- Focus on continuation to Higher education	19	10%
8- Competence and engagement of international teachers	12	7%
9. The students feel challenged	22	12%
10-All scores of exams count	3	2%
11. Extracurricular activities	12	7%
12. Well rounded curriculum	2	1%
<b>TOTAL</b>	<b>189</b>	

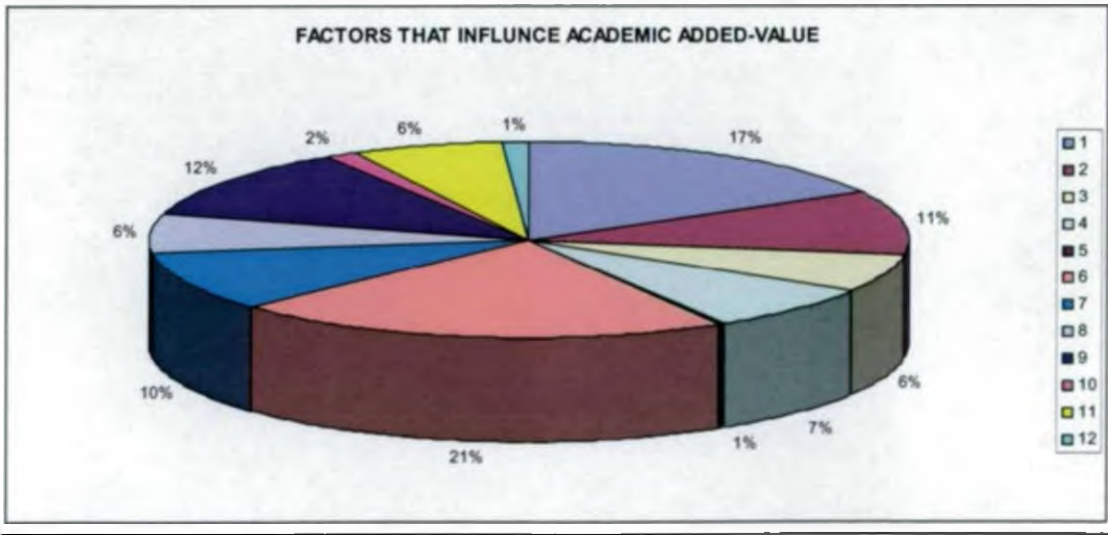


DIAGRAM 4

**5.4.5 Describe briefly the main factors you check to decide if ISF offers to its students the added value that promises.**

- Diverse community
- Strong curriculum
- Class size
- Feedback from ISF students
- Comparison between ISF and ex-school
- Feedback from ISF in case of a problem
- Children enjoy school
- Continuous development.
- Results
- Child becoming more mature as the time passes
- The student becomes more social and team work oriented.
- After school activities
- International environment.
- Curriculum of advanced classes
- Recognition for individual students.
- Individual fostering
- Teaching German for beginners
- School brochure
- Languages
- Group work

**Describe briefly the three main factors you check to decide if ISF offers to its students the added value that promises**

	<b>Number of Answers</b>	<b>Percentage</b>
1. Diverse community	6	5%
2. Strong curriculum	6	5%
3. Class size	6	5%
4. Feedback from ISF students	2	2%
5. Comparison between ISF and ex-school	6	5%
6. Feedback from ISF in case of a problem	3	2%
7. Children enjoy school	12	9%
8. Continuous development	12	9%
9. Results	3	2%
10. Child becoming more mature as the time passes	6	5%
11. The student becomes more social and team work oriented	18	14%
12. After school activities	9	7%
13. International environment	9	7%
14. Curriculum of advanced classes	6	5%
15. Recognition for individual students	3	2%
16. Individual fostering	6	5%
17. Teaching German for beginners	3	2%
18. School brochure	3	2%
19. Languages	6	5%
20. Group work	6	5%
<b>TOTAL</b>	<b>131</b>	

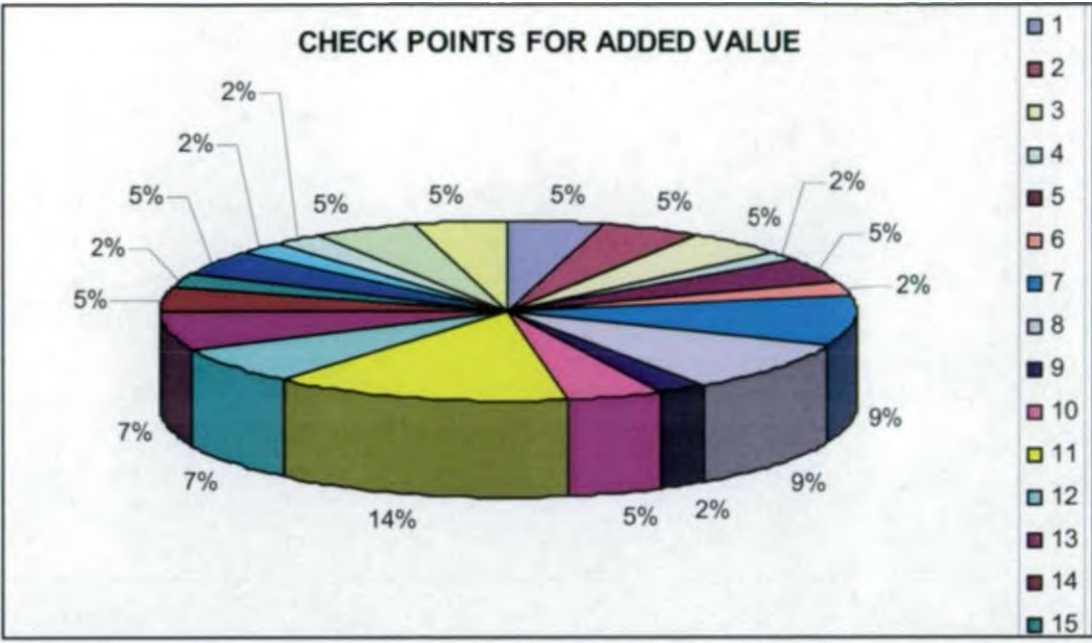


DIAGRAM 5

## 5.5 Enrolment data and charts<sup>19</sup>

### 5.5.1 Enrolment by Nationality:

Nationality	Boys Enrolled %	Girls Enrolled %	Total Enrollment
Local Nationals (German)	55%	45%	304
Argentina	100%	0%	1
Australia	25%	75%	4
Austria	63%	37%	16
Belarus	0%	100%	1
Belgium	50%	50%	2
<b>Benin</b>	<b>67%</b>	<b>33%</b>	<b>3</b>
Brazil	46%	54%	13
Canada	40%	60%	5
China	50%	50%	2
Colombia	0%	100%	2
Croatia	100%	0%	1
Denmark	100%	0%	2
Finland	20%	80%	5
France	32%	68%	22
Greece	56%	44%	9
Hong Kong	0%	100%	1
Hungary	25%	75%	4
India	30%	70%	10
Iran	100%	0%	2
Israel	100%	0%	3
Italy	52%	48%	23
Japan	52%	48%	21
Kenya	0%	100%	1

<sup>19</sup> All the data was taken by the official records of the ISF

Korea	52%	48%	151
Luxembourg	100%	0%	2
Malaysia	100%	0%	1
Mexico	43%	57%	7
Netherlands	57%	43%	14
New Zealand	67%	33%	3
Pakistan	60%	40%	5
Peru	100%	0%	2
Poland	0%	100%	1
Portugal	50%	50%	2
Romania	0%	100%	1
Russia	86%	14%	7
Singapore	67%	33%	3
Slovenia	50%	50%	2
South Africa	83%	17%	6
Spain	56%	44%	18
Sweden	71%	29%	7
Switzerland	0%	100%	3
Thailand	50%	50%	2
Turkey	25%	75%	4
UK	56%	44%	52
Ukraine	100%	0%	1
USA	56%	44%	122
Venezuela	100%	0%	1
<b>Total Enrolment 2004</b>			<b>874</b>

## 5.5.2 Enrolment by Gender

### Current Enrolment by Gender

Grade or Level	Boys Enrolled Number	Boys Enrolled %	Girls Enrolled Number	Girls Enrolled %	Total Enrollment
KG1	7	47%	8	53%	15
KG2	18	47%	20	53%	38
1	57	56%	44	44%	101
2	36	47%	40	53%	76
3	42	50%	42	50%	84
4	44	49%	45	51%	89
5	40	50%	40	50%	80
6	66	70%	28	30%	94
7	30	45%	37	55%	67
8	37	53%	33	47%	70
9	36	55%	29	45%	65
10	25	60%	17	40%	42
11	16	70%	7	30%	23
12	14	47%	16	53%	30
<b>Total all grades</b>	<b>468</b>	<b>54%</b>	<b>406</b>	<b>46%</b>	<b>874</b>

**5.5.3 Data showing results of external exams**

**IGCSE Examinations**

<b>Grade</b>	<b>3 years ago</b>	<b>2 years ago</b>	<b>1 year ago</b>	<b>TOTAL</b>
<b>A*</b>	14	25	35	74
<b>A</b>	31	32	67	130
<b>B</b>	44	39	65	148
<b>C</b>	24	31	30	85
<b>D</b>	13	10	12	35
<b>E</b>	6	3	1	10
<b>F</b>	1	3	0	4
<b>TOTAL</b>	<b>133</b>	<b>143</b>	<b>210</b>	<b>486</b>



IGCSE 2001-2002



DIAGRAM 6

IGCSE 2002-2003

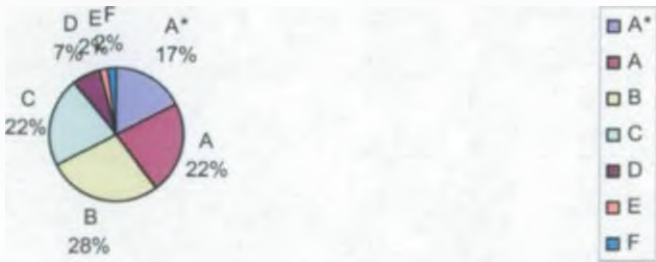


DIAGRAM 7

IGCSE 2003-2004

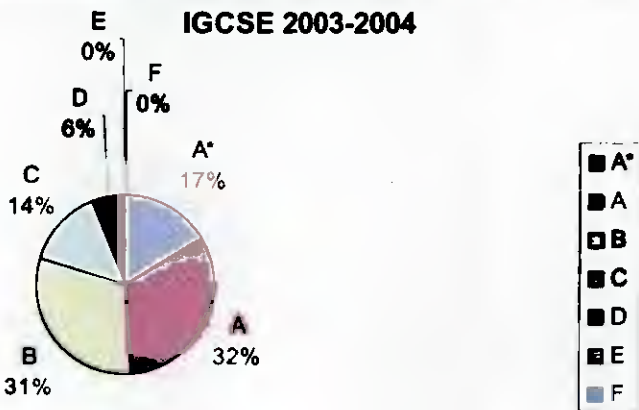


DIAGRAM 8

5.5.4 AP Examinations

Grade	3 years ago	2 years ago	1 year ago	TOTAL
5	11	30	19	60
4	7	7	8	22
3	5	12	8	25
2	1	5	2	8
1	1	0	1	2
TOTAL	25	54	38	117

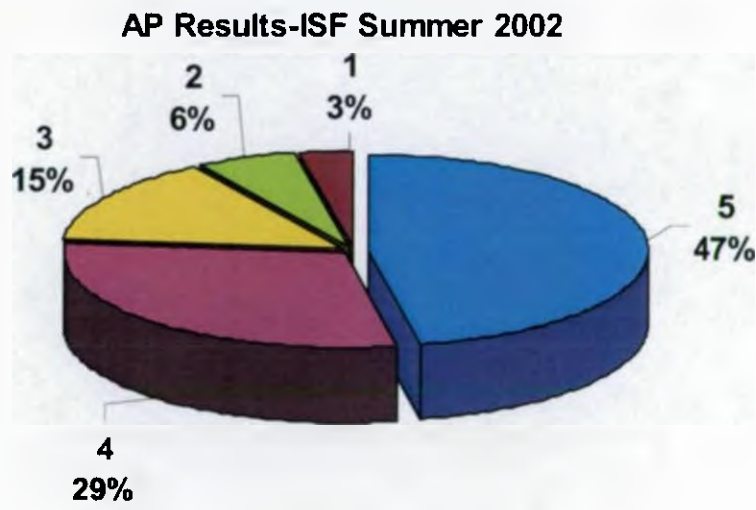
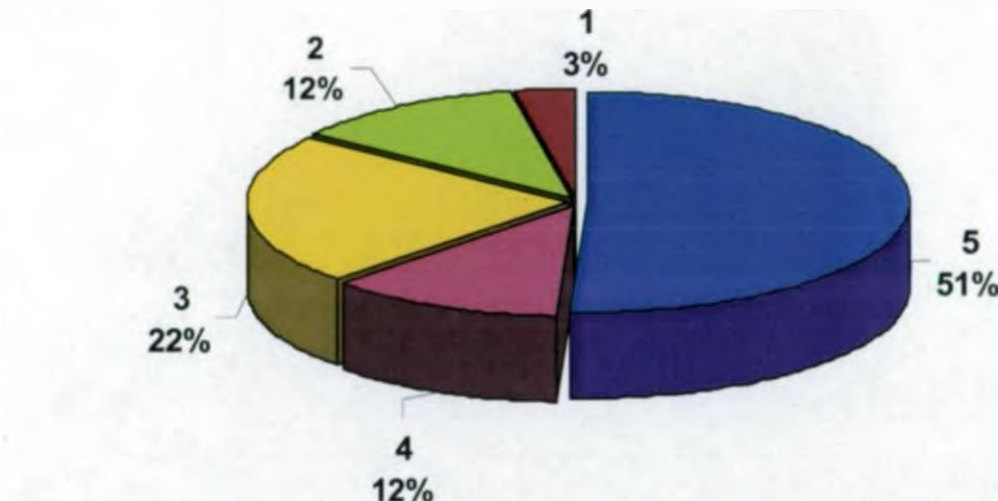


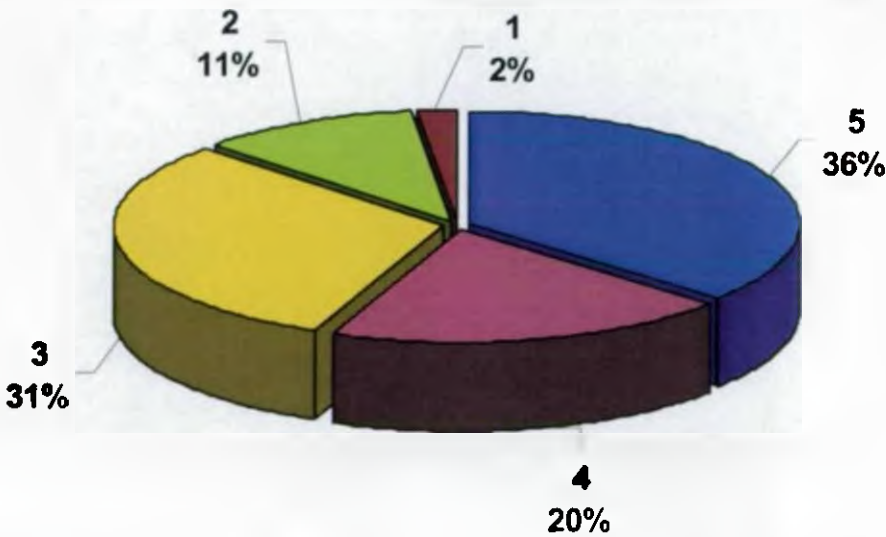
DIAGRAM 9

**AP Results - ISF Summer 2003**



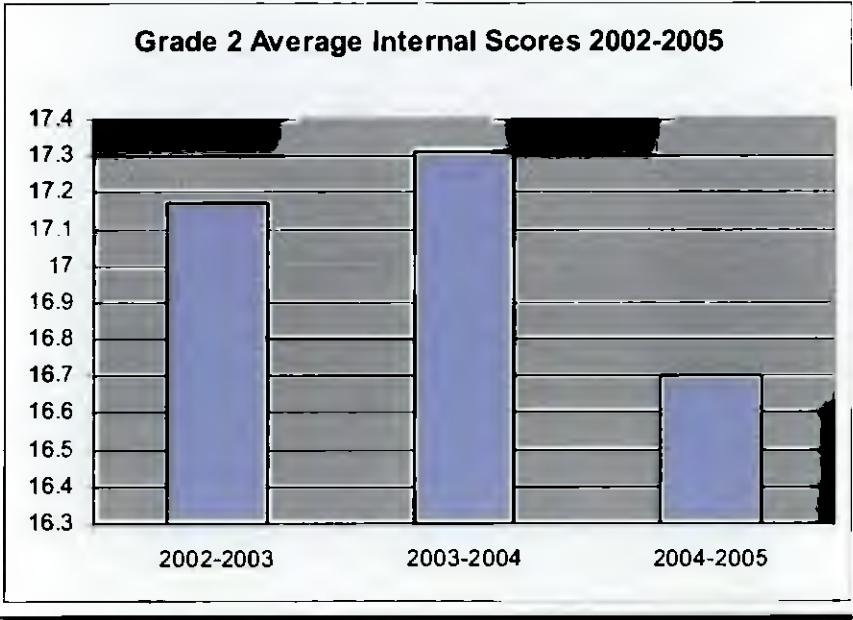
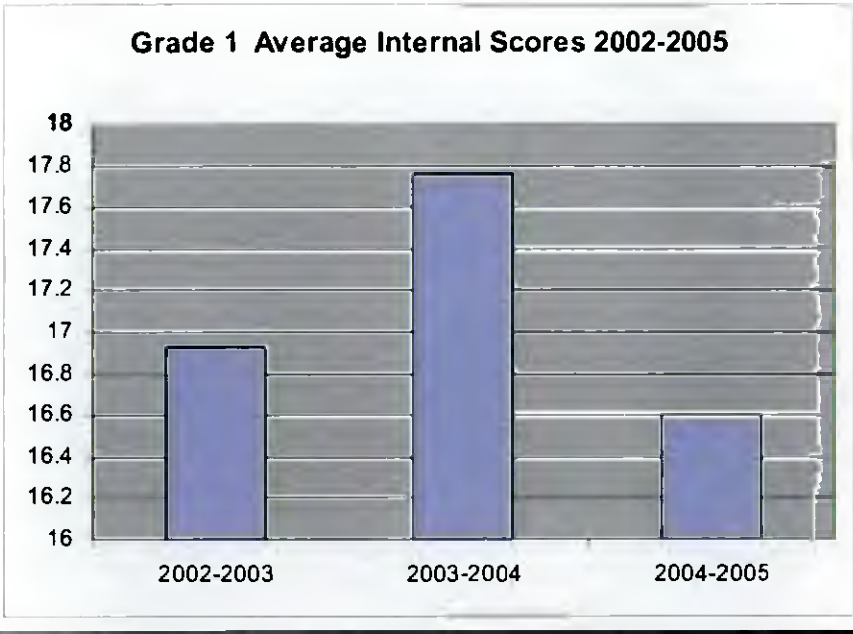
**DIAGRAM 10**

**AP Results - ISF Summer 2004**

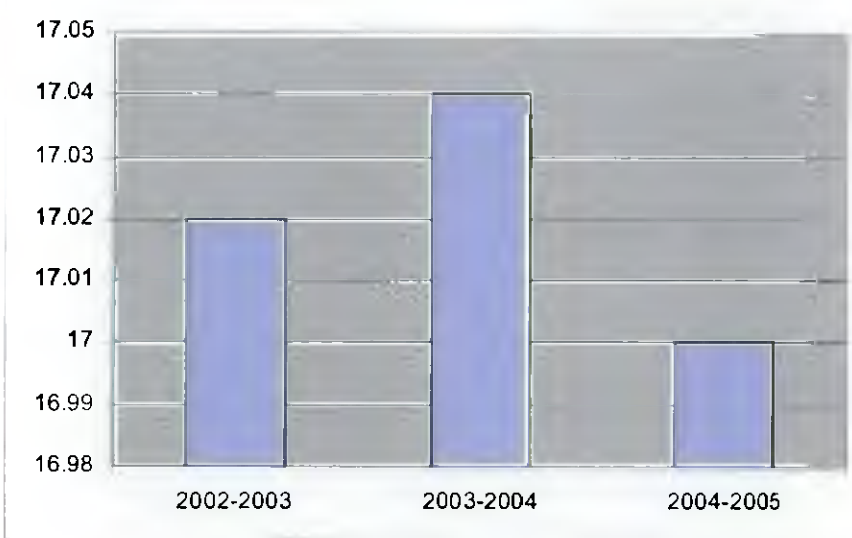


**DIAGRAM 11**

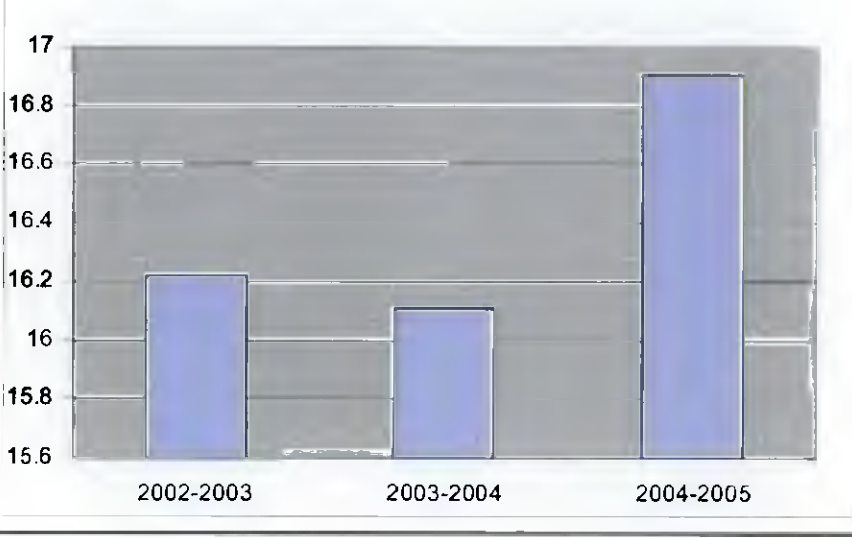
5.5.5 Average internal scores by Grade



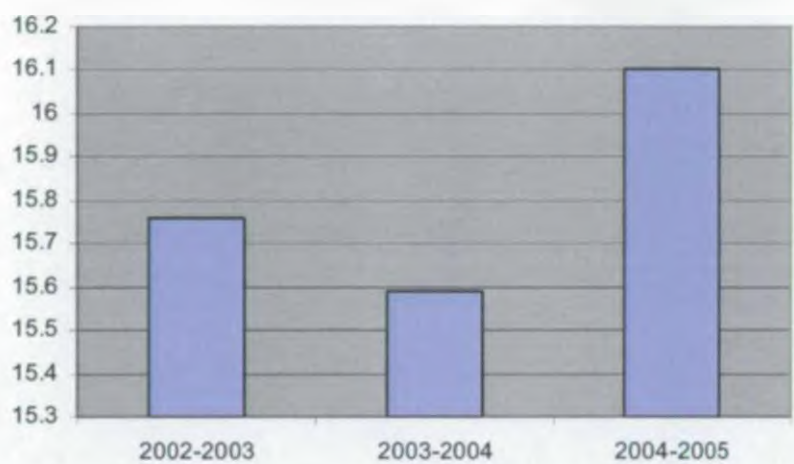
**Grade 3 Average internal Scores 2002-2005**



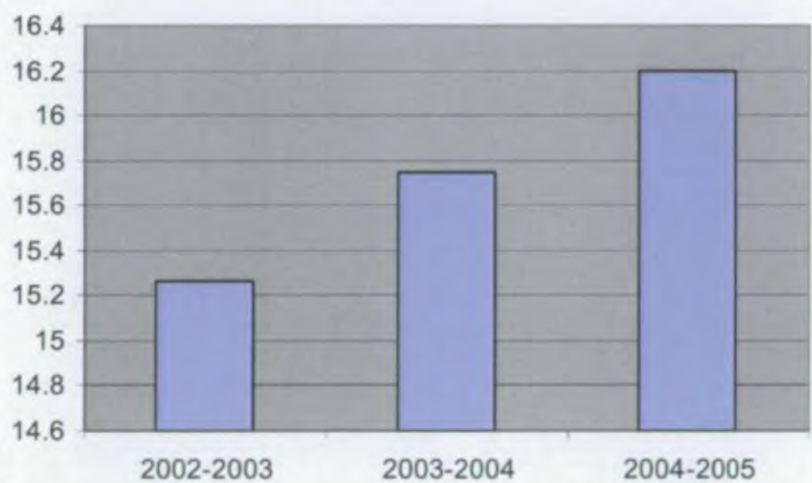
**Grade 4 Average Internal Scores 2002-2005**



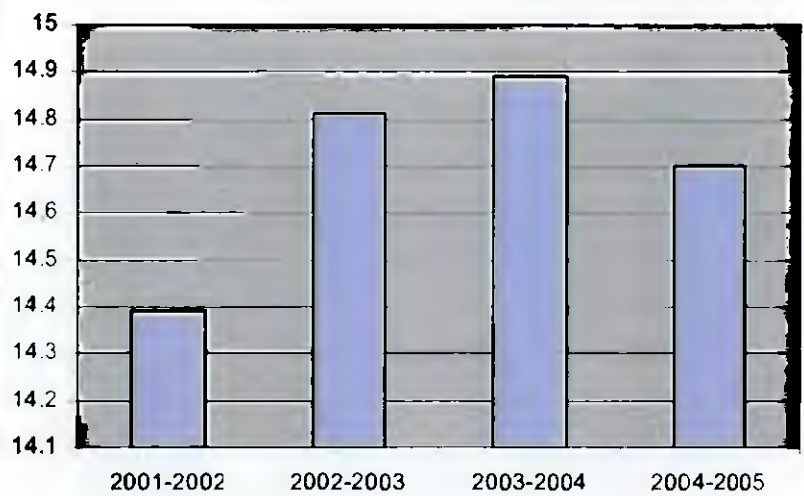
**Grade 5 Average Internal Scores 2002-2005**



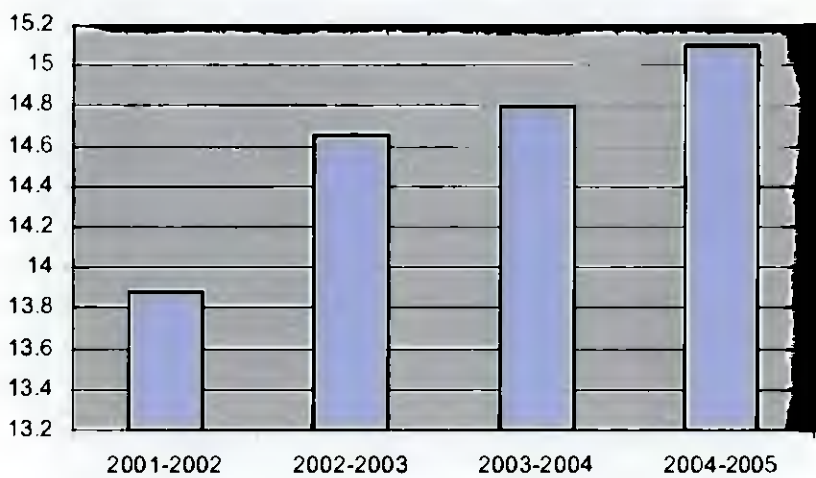
**Grade 6 Internal Scores 2002-2005**



**Grade 7 Average Internal Scores 2001-2005**

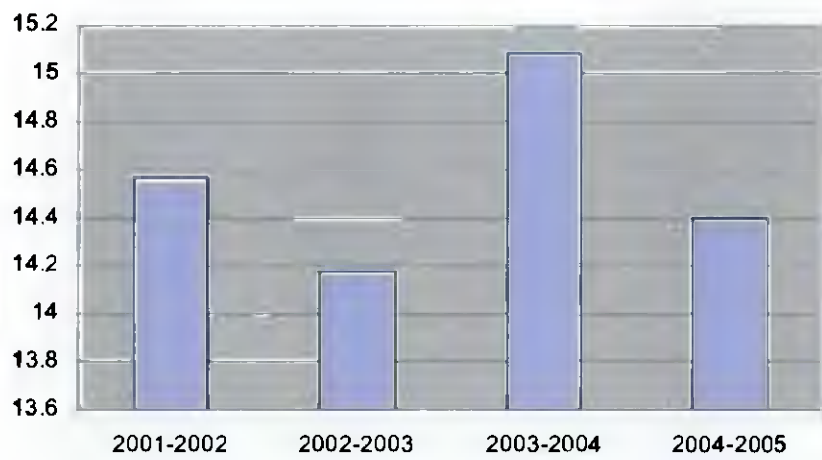


**Grade 8 Average Internal Scores 2001-2005**

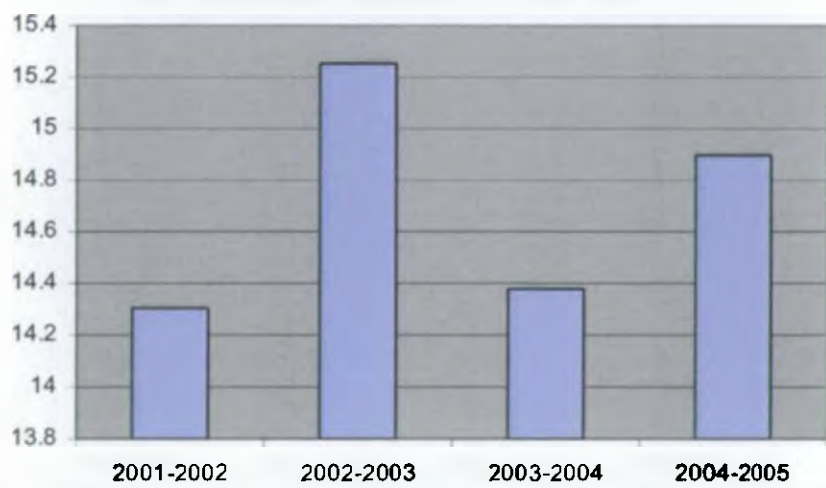




**Grade 9 Average Internal Scores 2001-2005**

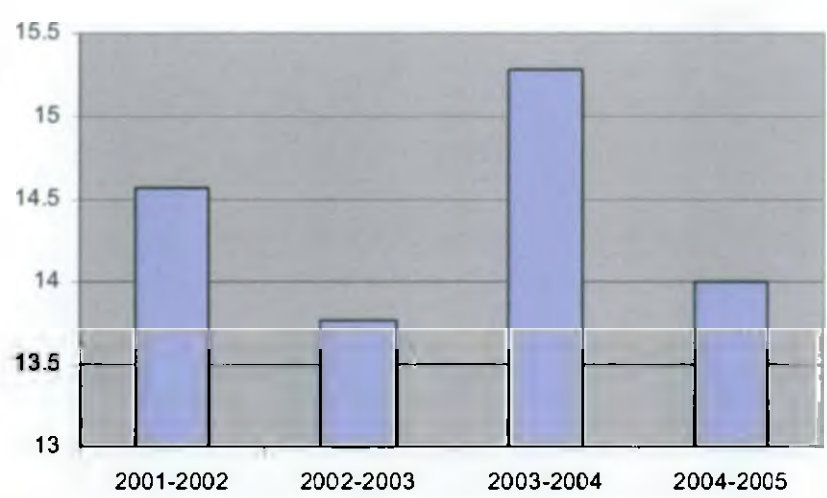


**Grade 10 Average Internal Scores 2001-2005**

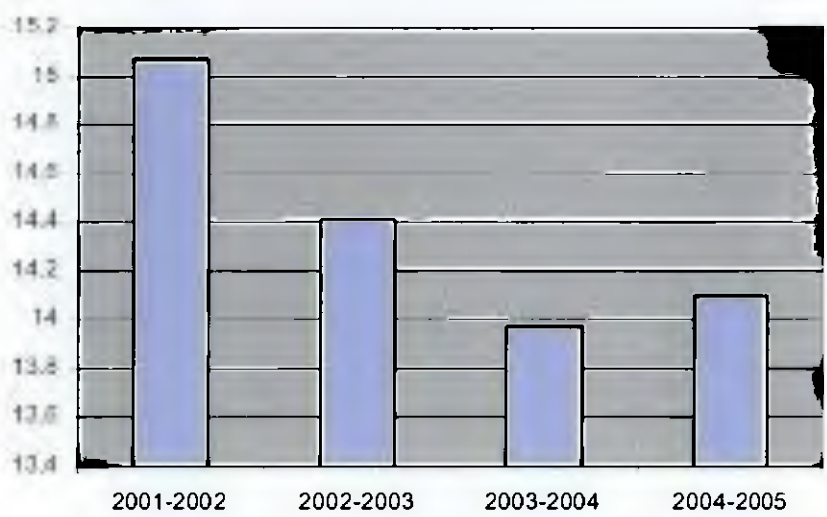




**Grade 11 Average Internal Scores 2001-2005**



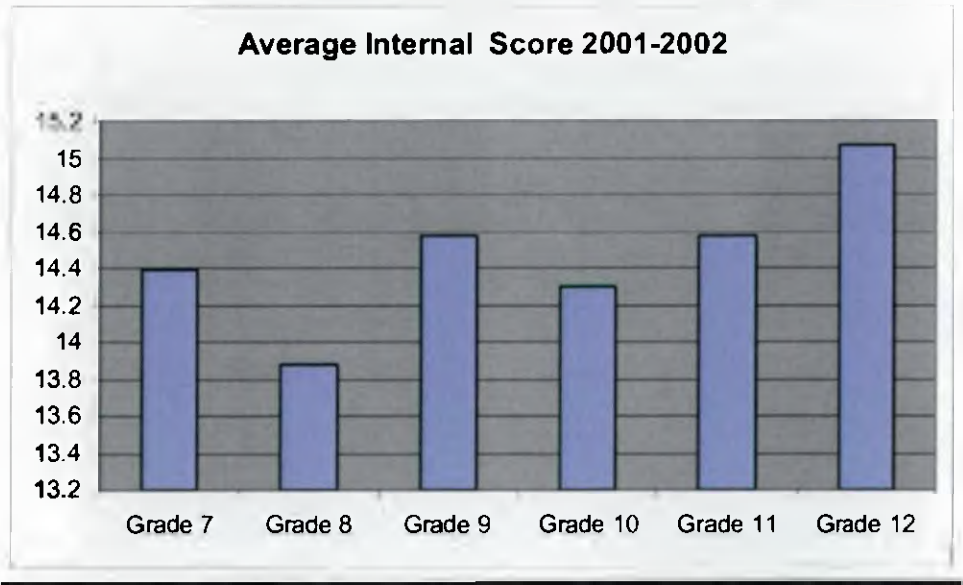
**Grade 12 Average Internal Scores 2001-2005**



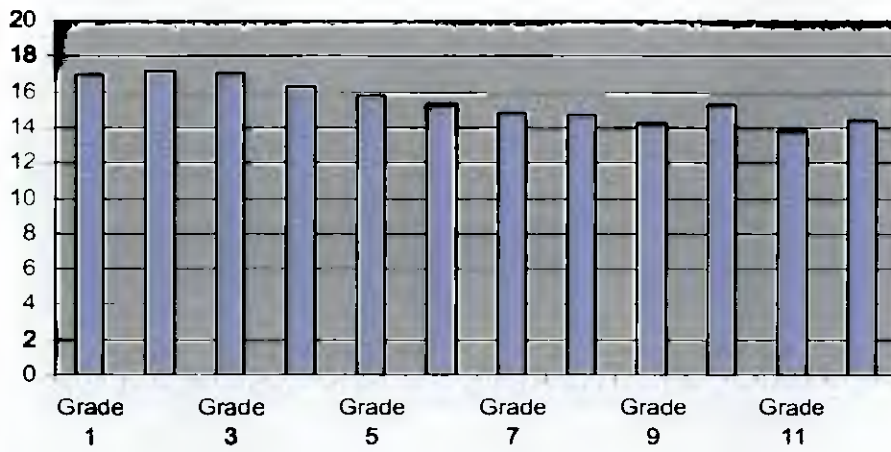
5.5.6 Yearly Internal Averages Comparison

Internal Grades

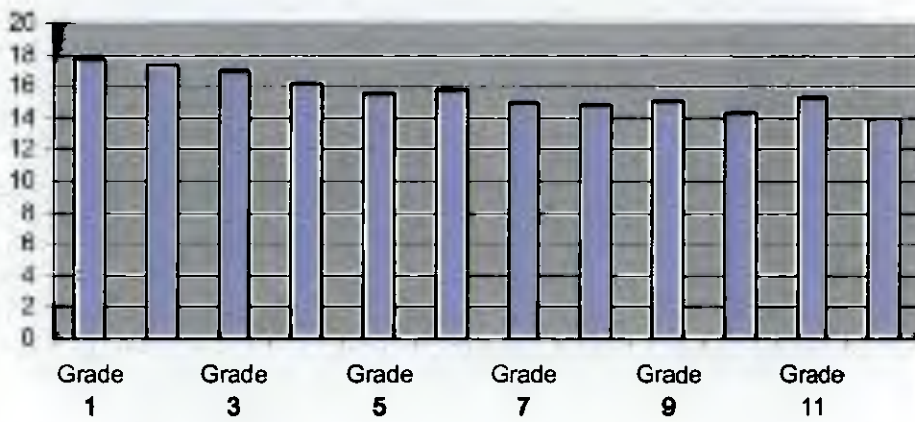
	2001-2002		2002-2003		2003-2004		2004-2005	
	Total enrolment	Class average	Total enrolment	Class average	Total enrolment	Class average	Total enrolment	Class average
1			106	16.93	70	17.76	101	16.6
2			85	17.17	86	17.31	76	16.7
3			108	17.02	81	17.04	84	17
4			108	16.22	98	16.11	89	16.9
5			81	15.76	89	15.59	81	16.1
6			86	15.26	65	15.75	94	16.2
7	56	14.39	77	14.81	78	14.89	67	14.7
8	40	13.88	58	14.65	67	14.79	70	15.1
9	32	14.57	45	14.18	50	15.08	64	14.4
10	26	14.3	33	15.25	30	14.38	42	14.9
11	19	14.57	15	13.77	29	15.28	23	14
12	5	15.07	20	14.41	13	13.97	30	14.1
TOTAL	178	14.46	822	15.45	756	15.66	821	15.56



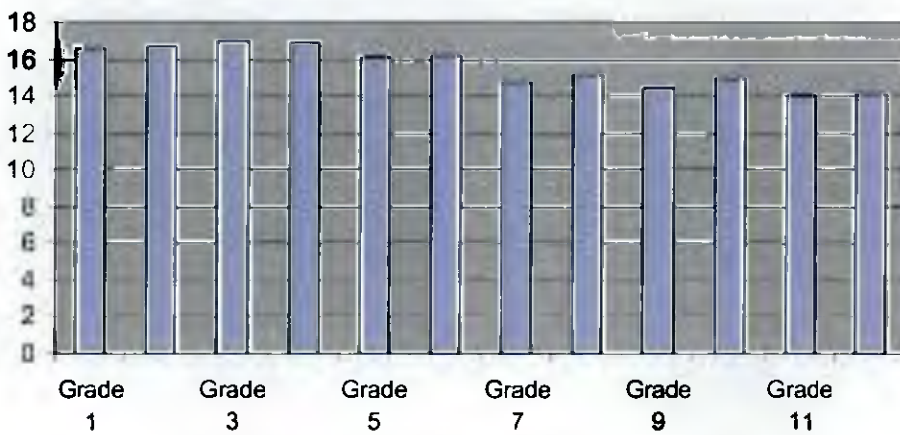
**Average Internal Score 2002-2003**



**Average Internal Score 2003-2004**



**Average Internal Score 2004-2005**



### 5.5.7 Higher Education Acceptance

Graduates entering universities	2002	2003	2004
Number	5/5	18/20	9/12
Percentage	100%	90%	75%

Graduates entering vocational or technical schools	2002	2003	2004
Number	0	1/20	1/12
Percentage	0%	5%	8.33%

### 5.5.8 AP English Lit.-ISF internal grades comparison

#### List of grades of various students

AP		2006		2005		2004		2003		2002		2001	
Year	grade	overall <sup>20</sup>	compo <sup>21</sup>	overall	compo	overall	compo	overall	compo	overall	compo	overall	compo
2006	3	12.14	11.92	14.74	15	16.58	13.76	16.98	15.63				
2006	2	11.98	12.52	13.05	13.29	15.5	15.6	16.42	14.35				
2006	4	15.15	14.95	13.87	13.51	16.15	16.59	15.76	13.25				
2006	3	11.35	11.6	12.36	11.88	14.79	12.63	15.49	13.63				
2006	3	13.47	13.68	14.61	14.8	14.7	13.77	16.15	14				
2006	2	14.55	14.47	15.2	14.69	17.39	15.15	17.41	16.48				
2006	2	13.6	13.95										
2006	5	15.25	15.1										
2006	3	13.75	14.44	13.64	13.2	16.66	12.16	17.81	17.45				
2006	3	12.21	12.92	15.22	16.69	15.92	13.23	16.66	16.05				
2006	5	16.17	16.2	16.61	16.75	17.83	16.28	15.95	13.35				
2005	2			12.9	12.14	13.4	13.39	16.19	14.95	17.63	16.93		
2005	3			13.96	12.96	15.09	15.81	14.62	13.71	16.14	14.08		
2005	4			16.52	16.65	16.31	17.29						
2005	5			15.34	14.96	15.63	15.47	17.36	15.98	16.61	15.2		

<sup>20</sup> Overall internal score in ISF

<sup>21</sup> Internal score in Composition

AP		2006		2005		2004		2003		2002		2001	
Year	grade	overall	compo	overall	compo	overall	compo	overall	compo	overall	compo	overall	compo
2005	3			15.35	15.51	13.59	13.5	16.83	15.23	16.39	15.1		
2005	3			15.15	15.1	14.26	13.92	17.05	15.23	16.48	12.95		
2005	3			16.37	16.55	16.49	16.67	17.61	15.95	18.16	17.43		
2005	3			16.28	15.6	12.62	12.11	15.95	15.36				
2004	3					12.2	11.6	14.2	14.4	14.8	11.5	16.7	15.3
2004	3					15.8	15.8	16.4	16.3	16.5	16.5	17.9	17.4
2004	5					16.7	17.7						
2003	5							19	19.3	17.4	17.8	17.9	16.6
2003	5							18.2	19.4	16.9	16.7	18	16
2003	2							13.8	15				
2003	2							12.1	13	13.4	11.5		
2003	2							16.4	17.8	14.8	15		
2003	3							14.6	14.9	15.1	15.1	14.7	15.8
2002	3									14.08	12.8	16.2	17.3

Total Results	High <sup>22</sup>	Low	Equal
overall	50,00%	17,35 %	32,65%
compo	42,57 %	29,70 %	27,72 %

<sup>22</sup> In comparison to ISF internal grades

### 5.5.9 INTERNAL-EXTERNAL EXAMS COMPARISONS - TALLY

EXAM	COURSE	TOTAL	ISF High <sup>23</sup>	%	ISF Low <sup>24</sup>	%	ISF Equal <sup>25</sup>	%
IGCSE	2003	130	36	28%	34	26%	60	46%
	2004	225	48	21%	112	50%	65	29%
	2005	220	68	30%	55	25%	97	45%
	2006	273	81	30%	106	38%	86	31%
	<b>SUB TOTAL</b>	<b>848</b>	<b>233</b>	<b>27%</b>	<b>307</b>	<b>36%</b>	<b>308</b>	<b>37%</b>
AS/AL	2003	16	12	75%	0	0	3	25%
	2004	8	7	88%	0	0	1	12%
	2005	20	3	15%	2	10%	15	75%
	2006	16	8	50%	1	6%	7	43%
	<b>SUB TOTAL</b>	<b>60</b>	<b>30</b>	<b>50%</b>	<b>3</b>	<b>5%</b>	<b>26</b>	<b>45%</b>
AP	2003	68	20	29%	12	17%	36	53%
	2004	41	20	49%	7	17%	14	34%
	2005	121	43	35%	20	16%	58	48%
	2006	95	25	26%	20	21%	50	52%
	<b>SUB TOTAL</b>	<b>325</b>	<b>108</b>	<b>33%</b>	<b>59</b>	<b>18%</b>	<b>158</b>	<b>49%</b>
<b>TOTALS</b>	2003	214	68	32%	46	21%	100	45%
	2004	274	57	21%	119	43%	80	29%
	2005	361	114	31%	77	21%	170	48%
	2006	384	114	30%	127	33%	143	37%
	<b>Total</b>	<b>1233</b>	<b>353</b>	<b>29%</b>	<b>369</b>	<b>30%</b>	<b>493</b>	<b>41%</b>

<sup>23</sup> ISF high means that the internal score was higher than the score received from the external exam

<sup>24</sup> ISF Low means that the internal score was lower than the score received from the external exam

<sup>25</sup> ISF Low means that the internal score was equal to the score received from the external exam

### 5.5.10 SOME ELABORATIONS

From the data presented in the sections 5.5.1 to 5.5.9 some comments are presented below:

Section	Title	Period	Comments
5.5.1	Enrolment by Nationality	2004	ISF provides International environment
5.5.2	Enrolment per Gender	2004	Balanced between boys and girls enrolled to ISF
5.5.3	Data showing results of IGCSE <sup>26</sup> external exams	Past 3 years	50% of the students achieved A or A*(highest possible grades)
5.5.4	Data showing results of AP external exams	Past 3 years	60/117 = 51% of the students achieved 5 (highest possible grade)
5.5.5	Average Internal scores by Grade (Grades 1 to 12)	2001-2005	Averages higher than 14/20
5.5.6	Yearly Internal Averages Comparison	2001-2005	Averages higher than 14/20

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<sup>26</sup> IGCSE: International General Certificate of secondary Education (British System)



5.5.7	Higher Education Acceptance	2002-2004	32/37=86% of the students who graduated from ISF were accepted in Higher Education
5.5.8	AP English Literature <sup>27</sup> -ISF internal grades	2002-2006	The internal assessment grades are not consistent with the external grades
5.5.9	Internal-External exams (IGCSE, AS/AL <sup>28</sup> , AP) comparisons-Tally	2002-2006	The internal assessment grades are not consistent with the external grades

The data presented in Chapter 5 will be used in Chapter 6 for the definition of the Added value and the Methods of its measurement.

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<sup>27</sup> AP English Literature: External exam paper (Advanced Placement test-American system). It is considered as very demanding for non-native speakers

<sup>28</sup> A- Levels: British system

# Chapter 6

## Suggestions/Conclusions

### 6.1 Definition<sup>29</sup> of added value in the education

The added value is a measurement of quality in terms of the extend to which the educational experience enhances the knowledge, the abilities and the skills of the students. The added value is the difference between their attainments when the students have completed a period of their education and what they had already attained by the time they began. Value-added assessment is a way to measure teaching and learning. This method allows researchers to identify not only the progress made by individual students but also the extent to which individual teachers, schools, and districts have contributed to that progress.

Value-added assessment gives educators a powerful diagnostic tool for measuring the effect of pedagogy, curricula and professional development on academic achievement, and provides all stakeholders a fair and accurate foundation on which to build a new system of accountability. Thus, value-added assessment can show whether particular students - those taking a certain Algebra class, say - have made the expected amount of progress, have made less progress than expected, or have been stretched beyond what they could reasonably be expected to achieve. Using the same methods, one can look back over several years to measure the long-term impact that a particular teacher or school had on student achievement.

According to my research<sup>30</sup> in order to give an accurate definition to the added value of an educational system various dimensions should be taken into consideration because every educational institution tries to develop an array of capabilities. More precisely in the case of ISF my approach attempts to identify a number of dimensions that will provide clearer ideas about what has been transformed:

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<sup>29</sup> See Literature Review: Books 28, 29, 30, 31, 33, 35, 39, 50, 52, 53, 54, 56, 60, 64. Articles: 1, 4, 5, 6, 8, 18, 22, 30

<sup>30</sup> See 5.5.10, 6.6.7, Statistical analysis

## **Part 1:**

- **The academic results:** Effective schooling or lack thereof, influences a student's ultimate achievement. These schooling influences accumulate across the years and measurably affect students' attainment at least two years beyond the grade in which the student encountered them. Without a value added metric for measuring effective schooling, educators have no way of knowing if they are maximizing academic growth opportunities for all students. Therefore the development of effective assessment formats to measure general education outcomes such as critical thinking and problem solving are of crucial importance. The characteristics of exemplary assessment tasks classify the quality of the academic results. Finally, we need to investigate if we provide students with feedback that promotes and evaluates learning.
- **-Choice of different subjects:** Choice gets its impulse initially from the fact that parents should have a good deal of control over how their children are raised, and hence how they are educated, as a matter of right. However, a more innovative approach is based on the premise that students are in the best position to define "success" for themselves and, therefore, for the institution and its programs. An important part of this model should involve encouraging students to set high standards, documenting their goals and intended outcomes, and monitoring their progress toward achieving these outcomes. In this perspective the different subjects offered by an educational institution are of major importance. The environment of an International School puts automatically restrictions for some subjects like history or religious studies. Nevertheless, it is part of the job of the researcher to find the impact of that issue to the assessment of the education as a total.
- **Standards of the curriculum:** Curriculum is the plan for student learning which is implemented in schools. Over the past decade, there have been significant changes in the delivery of Education, in the business environment (including requisite skills required for employment and advancement), in the need for and focus on academic skills, and in the demand for continuing (college) education. If a school wants to maintain high standards of quality improved, this continually changing and evolving environment makes the review, revision, and validation of the curriculum framework imperative. To achieve excellence, the students must be challenged by a demanding curriculum suited to their goals. Whether they intend to go to university

or college, or to enter the workplace after secondary school, they must be focused on relevant learning. High quality curriculum can prepare students for success in their chosen careers and provide satisfaction as they realize their personal goals.

- **-Frequent monitoring of student progress:** In today's education climate, school success is defined as ensuring achievement for every student. To reach this goal, educators need tools to help them identify students who are at risk academically and adjust instructional strategies to better meet these students' needs. Student progress monitoring is a practice that helps teachers use student performance data to continually evaluate the effectiveness of their teaching and make more informed instructional decisions. Student achievement and behavior can be improved through frequent monitoring of student progress and positive feedback and recognition for gains made. Research has demonstrated that when teachers use student progress monitoring, students learn more, teacher decision-making improves, and students become more aware of their own performance. A significant body of research conducted over the past 30 years has shown this method to be a reliable and valid predictor of subsequent performance on a variety of outcome measures, and thus useful for a wide range of instructional decisions (Deno, 2003; Fuchs, Deno, & Mirkin, 1984; Good & Jefferson, 1998). Although student progress monitoring (then called curriculum-based measurement) was initially developed to assess the growth in basic skills of special education students, specific research has validated the predictive use of this method in early literacy programs (Good, Simmons, & Kameenui, 2001) and in the identification of general education students at risk for academic failure (Deno, 2003). In addition, some evidence shows the reliability and validity of student progress monitoring procedures in evaluating the progress of English language learners (Baker & Good, 1995).
- Fuchs and Fuchs (2002) conducted an analysis of research on student progress monitoring that considered only experimental, controlled studies. These researchers concluded that: When teachers use systematic progress monitoring to track their students' progress in reading, mathematics, or spelling, they are better able to identify students in need of additional or different forms of instruction, they design stronger instructional programs, and their students achieve better. (p. 1)

## **Part 2:**

- **-School facilities:** The age of a school building has been used as a surrogate factor to study the composite impact of school plant variables on pupil achievement at elementary, middle and secondary school levels (McGuffey, 1982). If school facilities are in disrepair, this situation affects the morale, health, and academic achievement of students (Frazier, 1993). Many research studies have been conducted in the area of school building age and its impact on student achievement.

Thomas (1962) in his study of the relationship between resource inputs and outcomes of education found that school building age was one of the independent variables having the greatest effect on educational outcomes. He concluded that a school building's age was consistently positive and related to pupil achievement. Plumley (1978) examined the relationship of school building age and student achievement of 4th grade students in selected schools in Georgia. The findings of the study indicated that the older the school buildings without the elements of modernization, the lower the composite vocabulary, reading, language, work-study and mathematics scores on exams. Based on the research in the area of school building age and academic achievement, it seems vital that educational consultants, architects and administrators be critically aware of the importance attached to the compatibility between the physical environment and student learning.

- **Activities/events:** The various activities and events that take place in the school community may have an important part to play in helping young people to achieve. It can offer new opportunities to participate and succeed in activities outside the classroom and help to increase young people's self-esteem and motivation to engage in in-school learning, resulting in a positive effect on their achievements in school and on their employability on leaving school. All these activities may involve parents, local businesses and the community, museums, libraries and leisure centers. The atmosphere is more relaxed than the one in the classroom and sometimes the learning process is facilitated. Through the activities and the various events the students develop critical skills, which are needed to work from problem to solution, to sort out errors and to pursue a single line of inquiry to a satisfactory end.

- **-The role of the students in the school community:** What is the school's vision for its students? Does everyone in the school believe that all students can learn at high levels and are committed to seeing each and every child reaching proficiency? Has the school's council and school staff engages its family members and community in open dialogue around the issues of bigotry, racism, sexism, discrimination, prejudice, segregation and intolerance? Are all the students in the school included and engaged in all activities regardless of ethnicity, gender, ability, and socio-economic status? Do all students in the school have access to the entire curriculum, including advanced courses and programs? Can the teachers explain how each student's culture could influence the child' learning style, and adjust classroom instruction appropriately?
  
- **Appreciation of other cultures:** Although there is no standard definition of culture, we describe it as the system of shared beliefs, values, customs, behaviors, and artifacts that the members of society use to cope with their world and with one another, and that are transmitted from generation to generation through learning. An International School consists of a diverse range of ethnicities, cultures, languages and religions that is constantly evolving. Learners need opportunities to explore their own range of identities: personal, group, regional, national and global. This includes who they are in relation to their local community and how to locate themselves within wider European society. Ultimately learners need to develop their critical capacity to reflect on their own values, traditions and beliefs and those of others.

Education that promotes cultural understanding and diversity is crucial for the future wellbeing of our society. Schools have a duty - not least for community cohesion - to ensure learners in every school, regardless of location and experience, gain a broad understanding of the country they are growing up in.

### **Part 3:**

- **Discipline/safe and orderly environment:** Discipline is a hot topic in education. The goal is to motivate key education and law enforcement policymakers, as well as students, parents and community residents, to vigorously advocate school safety. School safety includes keeping campuses free of crime and violence, improving discipline, and increasing student attendance. Schools that are safe and free of violence, weapons and drugs are necessary to ensure the well being of all children and the quality of their education.

While most schools have existing safety programs, these programs often need conscientious, creative application to improve their effectiveness. Some basic principles of a plan that could maintain a safe environment for the students and staff are:

- Involves all school employees.
- Defines behavioral expectations and consequences
- Actively teaches students the school's expectations at the beginning and throughout the year.
- Provides instruction in self-control and social skill strategies for all students.
- Designs a system that rewards all students for engaging in appropriate behaviors.
- Gives immediate feedback on inappropriate behavior and creates limits that make challenging behavior unproductive for students.
- Recognizes that some students have challenging and disruptive behavior. If not in place already, a team develops a positive behavioral support plan that is based on a functional assessment and is implemented with integrity and monitored for success.
- Evaluates school's effectiveness by systematically looking at areas such as: attendance rates, office discipline referrals (location, time, type), suspension/expulsion, and detention information.

Research has shown that such an approach using positive behavioral supports effectively increases appropriate behaviors of all students. Educators who take active roles and initiate positive programs — rather than just react when negative conditions arise — help create successful schools. Such schools are inviting,

supportive and safe places, a joyful community that promotes in-depth learning and enhances students' physical and emotional well-being.

#### **Part 4:**

- **-Focus on continuation to higher education/role of the careers advisor:** There are many organizations already working to widen opportunities for girls and boys who can help with activities to challenge stereotypes and open up choices. Promoting Higher Education should be an important goal for schools that strive for excellence. Sometimes it's easy to get students to consider higher education. They have a brother or sister in college or they've gone with their parents to college reunions. Promoting college may be more difficult with students from families with little or no exposure to higher education. However the role of the school community is to offer access to all sources available that could lead the student to choose a field of studies suitable for his abilities, skills and personality. Because every student is different, the career's advisor will need to find and employ different methods of motivating students toward a college education.
- **-Acceptances to Universities/Climate of high expectations for success:** For families dreaming of sending their children to a prestigious university, the stakes have never been higher. Competition has intensified as the kids of baby boomers reach college age, and tuition at private schools -- believed by many parents to be the best insurance for college admission -- is soaring to record levels. The number of acceptances a school achieves on yearly basis reflects partially the quality of work done during the school career of the students. Educators and students hold themselves and each other to high expectations. Such confidence promotes positive attitudes and behaviors and motivates students to tackle challenging learning activities. Successful schools recognize that young adolescents are capable of far more than adults often assume.



## **Part 5:**

- **-Instructional Leadership:** Conventional wisdom about schooling asserts the existence of an unmistakable positive correlation between the quality of teaching and learning in schools and the quality of leadership evidencing itself in schools. Parents and teachers as well as governmental officials, policymakers, and television pundits unanimously assert that the quality of school leadership significantly impacts student-learning outcomes. The operative notion is that the quality of teaching and learning is largely dependent upon an individual or group that exercises supervisory responsibility for the technology of schooling, namely, curriculum, teaching, and learning. Some dimensions of the instructional leadership that are critical need to be highlighted: identifying, fostering the acceptance of group goals, providing individual support, intellectual stimulation and high performance expectation. A shared vision and the mission statement derived from it should guide all decisions made about the school.
- **-Contribution of the educators:** Strangely enough, this was actually conventional wisdom for a long time- the teachers are not very important. Researchers and sociologists interested in education performed all kinds of complicated statistical modeling and analysis trying to find out what makes modern school system tick and what really determines whether or not the students succeed. They found that teacher effectiveness varies tremendously. Today a lot of researchers came to the conclusion that teacher effectiveness gains in achievement an influence bigger than race, poverty, parent's education, or any of the other factors that are often thought to doom children to failure. Effective educators understand the developmental uniqueness of the age group they are responsible for, the curriculum they teach, and effective learning and assessment strategies. They need specific teacher preparation before entering the classroom and continuous professional development as they pursue their careers.

One of the most wonderful things we see now in adulthood is that these children really remember one or two teachers who made the difference. They mourn some of those teachers more than they do their own family members because what went out of their lives was a person who looked beyond outward experience, their behavior, and their oftentimes unkempt appearance, and saw the promise. —Emmy Werner,

coauthor of *overcoming the Odds: High-Risk Children from Birth to Adulthood*, 1992

The students enjoy having a predictable environment. They feel safe because they know exactly what to expect each day. They like consistency in a world that can be very inconsistent. Procedures are simple, but their impact is enormous.

## **6.2 The above definition of added value in the education is scientifically accurate<sup>31</sup>. Some elaborations:**

Successful schools are dynamic places with high expectations for everyone. Effective improvements happen fully plan and are built around goals that educators, parents and other community members know and support. The bibliography shows that:

1. Effective schools have a clearly defined vision for the improvement of learning for each and every student.
2. Emphasis is on the achievement of a broadly defined set of standards that includes academic knowledge, skill, development, and standards of the heart.
3. Goals are framed in a way that can be benchmarked through the school year and measured at year's end. Progress is recorded and used for improvement efforts.
4. Communication about the goals as well as progress toward them is a regular part of school activities among all constituents.

A lot of researchers around the globe have thoroughly investigated the added value in education. It is quite interesting that projects produced by governments include in the definition of the added value only results of tests. In my opinion the reason behind this decision, is that politicians have the possibility to influence those results dramatically by using moderation of grades or lowering the standards of the questions given in the national exams.

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<sup>31</sup> See Literature Review. Books: 3, 10, 13, 15, 27, 32, 34, 45, 46, 48, 51, 57, 58, 59, 60, 61, 62. Articles: 3, 9, 10, 11, 17, 20, 27, 31, 32, 34

The variety of dimensions defining the added value increase significantly in the area of private education. In this sector the financial investments are often very high and the competition is fierce. Having a successful school means owning a business with huge profits. This environment becomes even more aggressive in the field of International Schools. Starting from the 20<sup>th</sup> century the movement of employees from one country to another became a frequent situation. The International Schools are pole of attraction not only from expatriates but also wealthy locals who decide to invest for a period of 14 years (kindergarten to grade 12) on average 120,000 Euros for the education of each of their children. My research showed that the languages, the high academic standards, the various facilities (e.g. sport facilities, theater) and the spirit of internationalism attract local customers.

According to my definition the academic results of a students constitute only one dimension of the value added. How about the fact that in some schools the variety of subjects offered is very limited? The academic balance of every educational system must be judged based on the opportunities offered to the students. For instance some students may have excellent academic results in mathematics but no choice to study arts. Bibliography shows that under those circumstances gifted people were treated as low performers with disastrous consequences for their self-esteem and career perspectives. Others have developed some aspects of their personality and faced social problems. Obviously this factor has a serious impact on the budget of every institution because variety of subjects/choices means more staff, more classrooms, and more supplies. Closely related to the variety of choices is the standard of the curriculum. Offering multiple courses is not a factor that isolated contributes positively to the added value of a system. Those courses need to be well elaborated in order to maximize the profit for the students. If the curriculum is too easy then maybe important concepts were not included or investigated in depth. If the curriculum is too sophisticated then it may be unfriendly to the audience and discouraging and in all means requires a very experienced and enthusiastic team of educators who will try the best approach. The frequent monitoring system is necessary because the immediate feedback from the school to the students and parents facilitates the procedure of remediation of academic gaps. We should not ignore the fact that the monitoring system itself needs careful approach. Often requires a very complicated and bureaucratic system that involves a lot

of parameters and people. The schools that have in place a good and effective monitoring system have already added value to their system.

The environment plays a key role according to the sociologists. Different projects show that the impact of the building and the area is crucial. A building designed by specialists in School buildings architecture has automatically enough light, space, maintains high safety standards and probably includes various sport and other facilities like auditoriums, restaurants, sport fields, music rooms, library, laboratories for sciences and computing. The area where the school building is located is considered by researchers as a very important factor for the smooth function of the school and indirectly influences the personality of the school community. A safe and friendly neighborhood guarantees no criminal or other unfortunate incidents with the students and the staff. In such an environment the school community builds relations of trust and collaboration with various stakeholders of the area as the students develop various projects. The students set the example for the local community but also benefit from the positive interaction.

The school life becomes more interesting and certainly more productive if various activities can take place in school. A major factor is the variety of facilities offered by the school. For example in a school with a library the students gain time by using the resources or in case where the school has good sport facilities tournaments take place and automatically the students learn how to host guests how to share the experience of sports and competition with other people of their age and the most important the school community has an additional opportunity to be more open to the society. All the above would not be possible without the contribution of the student body. A healthy school community has members who are ready to work as a team, to be creative, to be enthusiastic about the development of projects that will extend their experiences. Using their own perception about the society of the 21<sup>st</sup> century the young people are often innovative, creative, original. The interesting dynamics developed within the school body with some wise guidance can certainly be a decisive factor of success. However the added value in that would not be complete without the dimension of the appreciation of other cultures. In my case the added value is studied as directly related to an International School. Therefore it would have been a very serious mistake if the definition of the added value did not include the appreciation of other cultures.

According to the profile of the majority of International Schools the diversity of cultures within the student body and teaching staff is remarkable. One of the first goals of every school that wants to be consistent with the term International School is to make sure that words like racism and discrimination are excluded from the vocabulary and the attitude of all stakeholders. This is probably the most difficult task for the international community. Unfortunately, the political environment in most countries and the media do not support this effort. However the added value of the most perfect academically school should be graded with a zero in case that racism and discrimination were ignored.

During my research I studied the impact of the discipline system to various school communities. All agree that without a safe and disciplined environment the goals of education cannot be achieved. In some districts the schools have first to minimize the danger of criminal activity in the campus and then to start thinking about the academic progress of the pupils. The last 10 years we have been all witness of dramatic incidents of violence among students. The data shows that these incidents have an increasing rate especially in areas with serious socioeconomic problems. Apart of those extreme cases the class management and the behavior of all partners during the school day may build an atmosphere of trust, confidence and progress or a continuous confrontation from which nobody will be the winner. From all the above it becomes obvious that a well designed and mainly correctly implemented discipline system affects dramatically the school life and determines a considerable part of the academic and social added value. Building such a system requires the involvement not only of the members of the school community but also requires the knowledge of school psychologists and ideally has to be designed based on the local data and history of the area where the school is located. Researches show that every 10 years important parameters of the school environment should be revised and the policies followed have to be adjusted accordingly. The flexibility and the open minded but careful approach minimizes the incidents of violence and criminality within the school communities.

Somebody may think that the field of International Schools is less affected by the problems of discipline than other schools. The statistics show that the incidents of criminality are not frequent probably because the parents of the students are in their vast majority highly educated people and they keep continuously an eye on the behavior of

their children. A lot of readers of that project will probably disagree with this argument. A considerable part of the children who attend International Schools have to change schools at least 3 times during their school career. Some of them see those changes as a challenge but others face those changes with a lot of negativity, since every time they lose good friends and have no possibility to react. These categories of students need special treatment from the school community. Teachers, administrators, parents and supervisors have to work together, establish rules but also punish or give guidance to every individual separately. The teachers play a very important role in this process. They spend time during classes with the students and have the opportunity to study the behavior and the interaction with the other pupils. Establishing an atmosphere of mutual respect in the classroom is a task that requires dedication and a lot of energy from the teachers. The ability of the teacher to distinguish among the students those who need support academic or social becomes crucial. Frequently it is more important for the school to give solutions to social problems that its students face than to offer academic support firstly. The bibliography shows that if a student is happy and balanced the chances to become academically successful increase dramatically.

Nowadays the young people face worldwide the nightmare of unemployment. Parents and students start being very early concerned about the correct planning of the studies. The selection of the school determines in a percentage the opportunities open for the student in the future. Those of the parents who choose an International School examine, as I have seen from my research and experience, if a rigorous curriculum is offered. Somebody who graduates from an International School speaks normally at least 2 to 3 languages as almost a native speaker. Always one of those languages is English. Obviously a child who graduates from such a school has wider opportunities to choose the type of studies he wants to follow because he can communicate with more people. On top of that the majority of the International Schools prepare their students for external exams recognized widely (e.g. A-Levels, Advanced Placement, SAT, International Baccalaureate). One of the best proofs for the quality of education is the list of acceptances to Universities. The ratio of the students who are accepted yearly to top Universities worldwide is a valid indicator of the added value that a school offers to its students.

Undoubtedly, a school that achieves to have all its graduates to recognized Universities earns a very good reputation. If on top of that in that list appear names like Princeton, Cornell, Cambridge, Oxford and Imperial college then the school becomes a pole of attraction for more customers. We should not forget that the admission offices of top Universities have a common policy: they do not assess the students only academically but socially as well. In other words top scores in Mathematics; English, Chemistry and Economics are not well enough. The social involvement of the student, possible internships but also excellent presentation and communication skills are basic requirements. We should not ignore the fact that those Institutions search for personalities who are born leaders. It is obvious that this environment is extremely competitive. The financial background of more people becomes better every year especially in the western societies. As a result more parents have the financial means but also the educational background to send their children abroad. The role of the school becomes more complicated every year. In that context the careers advisor has a distinct position and responsibility in the school community. His role is complex. He must be an excellent mentor and have a very good knowledge of the different components that will lead a student to a successful University career. Without his guidance the students will not be able to have the complete picture of their potential.

A lot of articles in bibliography agree that if in a school there is a climate of high expectations then the students achieve better results. Benard (1995) describes the value of high expectations in the schools: "Schools that establish high expectations for all students--and provide the support necessary to achieve these expectations--have high rates of academic success (Brook et al., 1989; Edmonds, 1986; Howard, 1990; Levin, 1988; Rutter et al., 1979; Slavin et al., 1989). In the book *Fifteen Thousand Hours*, Rutter (1979) and his colleagues report on research that they conducted in schools located in some of the most poverty-ridden areas of London. Their findings show considerable differences in these schools' rates of delinquency, behavioral disturbance, attendance, and academic attainment (even after controlling for family 'risk' factors). The successful schools share certain characteristics: an emphasis on academics, clear expectations and regulations, high levels of student participation, and alternative resources such as library facilities, vocational work opportunities, art, music, and extracurricular activities. One of the most significant findings is that the longer students attend these successful schools, the more their problem behaviors decrease. In

unsuccessful schools, the opposite is true--the longer students attend them, the more they exhibit problem behaviors. Rutter (1979) concluded that, 'Schools that foster high self-esteem and that promote social and scholastic success reduces the likelihood of emotional and behavioral disturbance' (p.83).

All researchers of issues related to the education agree that in both public and private sector the added value will not be achieved if the administration of every school does not have an active, innovative approach. Behind the most successful schools we do not find necessarily huge financial means and luxury buildings but we definitely find staff that shares a vision about the improvement of the education. According to several international studies the effect of principal to learning outcomes is not direct but indirect. A good school leader possesses high authority, is seen as trustworthy people, is prominent actor in society at large, is an essential stabilizer, is mismanaging the school via traditional ways and has succeeded in stable environments. Therefore the challenge is the changing environment and the call for transformational leadership. The transformational leadership involves the principal who guides and inspires the teachers in the fields of the curriculum development, the culture the visions, the mission and the purpose of the school. All the above may lead to learning and growth. It proves to be very important for the principal and the Head of the school to clarify the pedagogical philosophy and practice of the school, to inspire a strong culture of learning and achieving and to regard teachers as highly qualified professionals who should not left alone.

Anyone who has worked in a school will know it is nonsense to say that principles do not have an impact on pupil learning. They do this by setting high standards for teaching quality and ensuring these are achieved. In fact, the most important thing Heads can do for their pupil is to make sure that there are good teachers in their classrooms. Toby Salt of the National College for School Leadership said it was clear head teachers and all school leaders did play a critical role in improving schools. "Just as great orchestras have great conductors so too do great schools have excellent leaders and teachers." The tasks of the teachers are multiple. All students must learn the advanced skills that are the key to success in college and in the 21st century workplace. Every student should receive frequent and ongoing support from the teaching staff throughout their high school years. As part of their class work, students should have opportunities to design



independent projects, conduct experiments, solve open-ended problems, and be involved in activities that connect school to the rest of the world. The teachers should build a climate of trust and respect, they should encourage peaceful solutions to conflict, and they should respond directly to any bullying, verbal abuse, or other threats. Every high school teacher should know well the subjects they teach and should know well how to teach all kinds of students, from all kinds of backgrounds. New teachers should get the guidance and mentoring they need to be successful in the classroom. All teachers should have enough time to plan lessons, carefully review student performance, and continuously improve their teaching. Every school also needs a strong educational team to define a vision of academic excellence, to develop an engaging and coherent curriculum, and serve as a mentor and role model for the students. Underestimation of the role of the teachers in a school community may lead to an educational monster where managers try to replace educators.

### **6.3 Academic added value**

One of the main objectives of that thesis is to define and measure the academic added value that SABIS® and in particular ISF possibly offers to the students. After a thorough investigation I came to the conclusion that the components that comprise the academic added value include: the academic results of the students, the choice of different subjects, the standards of the curriculum, the frequent monitoring of student progress, the focus on continuation to Higher education, the acceptances to Universities, the instruction Leadership and the contribution of the educators.

In my opinion a researcher needs to look very carefully into the term 'successful academic results'. It is interesting that the webs sites of private International Schools and not only, demonstrate IGCSE, A-Level, IB, AP results. The parents and the public in general define the reputation of the school by the yearly statistics related to the exams mentioned above. Initially it seems to be the only objective way of looking into academics. However in schools that are not selective there are often students and even though both the school community and the student put a lot of efforts, the academic results look poor. Is it always true? What about students who for example are very weak in mathematics but exceptionally good in arts, sports or music? Does the society assess

all subjects using the same weight? What about the students who have minor or serious learning disabilities? Should we include them to the statistics? From those examples becomes obvious that the assessment of the academic results of an institution should not be exclusively based on numbers but should have taken into consideration the entrance level of the student when he sat his placement test. Lately top Universities trust less the academic results coming from various resources and widen the entrance requirements. As a result students with outstanding grades are not necessarily accepted in Universities like Oxbridge, Harvard and Princeton. As it was mentioned before it is not unlike having reputable exams where the standards turn out to be lower because of political manipulations. Meaningful assessment of learning occurs over time and through a variety of measures. No one measure will tell us everything we need to know about a students' grasp of the standards. Successful schools give careful attention to daily, classroom assessments as well as periodic tests.

The good academic results are closely related to the choices offered by any school. The private sector of the education offers often a satisfactory selection of subjects that covers Languages, Mathematics, sciences, natural sciences, philosophy, art, music and computing. As a complement some schools offer extracurricular activities and philosophy. Some educators express their concerns about the absence of classical studies especially in the International Schools. They believe that through the exploration of that field students will develop more sensitivity and will behave less cynically as adults. However, no matter if somebody agrees or not with the above, it is generally accepted that a narrow-minded course selection drives the student body to a certain limitation of abilities and achievement.

The school years are a remarkable stage of the life cycle. The students experience rapid and significant developmental change. The characteristics of the student body need to be considered by the educators when planning curriculum, instruction, and assessment and when structuring the environment of the school. Joan Lipsitz, a distinguished middle grades researcher, asserted that schools must be responsive to their developmental needs. Intellectual development refers to the increased ability of people to understand and reason. In students, intellectual development is not as visible as physical development. Those who develop the curricula need to consider the varying intellectual developmental differences of students when planning learning experiences.

To address this diversity the teachers need to provide to concrete thinkers more structured learning experiences, while abstract thinkers need more challenging activities. It is important for those who develop the curricula to remember that students are under stress when academic content is introduced too early. Significant part of the curriculum should be the intellectual development and the moral reasoning. From all the above we come to the conclusion that a rigorous curriculum has some delicate aspects which can be handled by experienced and dedicated educators. In far too many schools today, curriculum is defined in narrow, academic terms. The result is a school experience that is developmentally inappropriate for many children. The effects of such inappropriate experiences on later school successes can be dramatic.

For all stakeholders, students, teachers and parents the continuous feedback about the academic results of a student is invaluable. In various educational systems the testing of students takes place few times during the academic year. As a result there is no time for problems to be fixed and the gaps cannot be covered in an appropriate manner. However the methods used for the monitoring of the students progress have a great portion in the successful accomplishment of the mission of a school. Standardized tests of all types can and do play a valuable role in helping to evaluate overall progress toward desired outcomes. Unfortunately, few parents, teachers, or administrators fully understand the limitations of standardized tests. As a result, test scores are often used to draw inappropriate conclusions about individual children's strengths and weaknesses and to make decisions about their educational careers. The frequency of testing has to be studied carefully because under some circumstances becomes meaningless. For instance if the students know that the score of a test they have to sit very frequently does not have a heavy weight on their final mark they may not study and therefore give the wrong feedback to the teachers. Also this kind of overemphasis on preparing students to take tests often results in unrealistic expectations about what children should know at any level. Performance inventories and portfolios of students' work provide a far more meaningful picture of then students' progress than any standardized test.

An ultimate goal for almost every school is to motivate its students to continue their studies in the Higher Education. In some modern social contexts the failure in continuation to higher education is faced as failure of the family. This extreme approach does not certainly represent the reason for which every human being should have been

able to continue his life long studies. As we live in a very competitive world the level of studies determine very often the socio-financial environment where we are classified. Unfortunately the amazing experience of education is not presented as the main reason for continuation of the studies. The pursuit of a good career pushes the young people to Universities. The academic added value of an educational system is partially determined by the level of success of its students when they apply to universities. A lot of schools have an amazing reputation because over the years their graduates achieved entrance to top Universities worldwide.

Whenever I give training to new teachers I mention an example that illustrates the role of the teacher in the school life. It happened that we went to the theatre twice to see 'Mac Beth'. The first performance took place in a small theatre with non-professional actors and was so boring that we felt almost asleep. Some months later a friend persuaded us to attend a performance of the same play in the London' Royal Theater. It was an amazing experience. What did it happen? The play was exactly the same; a masterpiece of the global literature. Who made the difference? The answer is obvious: the actors. The role of the teacher is very complex. If we see teachers as a tape that transmits knowledge to the students then we have probably lost the meaning of education. As we will see later in the conclusions of that research the teacher has the power to make the school a constructive, amazing experience or a period full of stress and limited experiences. The teacher sets up a role model for the students and has the possibility to stigmatize them positively or negatively for their whole life.

## **6.4 Social added value**

The social added value that an educational system and in particular SABIS®/ISF should offer to its students defined by the school facilities, the activities and events, the role of the students in the school life community, the appreciation of the other cultures and finally the discipline and the safe and orderly environment.

The majority of private schools due to the expensive fees they charge, have the possibility to offer to their students high standard school facilities; e.g. gym clubs, tennis courts, swimming pools, library, auditorium and various sport, music and art equipments. As a result the students have the privilege to attend various activities inside the campus, which facilitates the development of social life, saves time and allows the parents to pick up their children late in the afternoon. In particular for the International Schools this is a very important parameter because the school is the only place for social interaction often for long periods. The students can play a significant role in the every day life of the community inside and outside campus. Their involvement if encouraged and carefully coordinated leads to various fruits: invaluable friendships, development of organizational and management skills, improvement of presentation skills, contribution to the school life in various ways (activities, peer tutoring, events), and finally the students are the best ambassadors of the school community to the local community. These active involvements of the students to the school life bring people together and make the relation among different cultures smoother. That facilitates the integration of the newcomers to the system. According to some administrators the Student Life is the glue in the school body.

In all communities prosperity is developed only during periods where the environment is peaceful. Similarly the discipline, the quite and peaceful atmosphere is an ideal environment for the educational process. Should we make the assumption the incidents of violence, bullying or criminal behavior are rare in the sector of International Schools? Maybe some would say that this is a very naïve approach. Without any doubt the solid educational and financial background of the families help in that direction. However, experience shows that in some cases the criminal behavior may have different roots. Given all the above, it is very important for every school community to put in place the mechanisms that will reassure the smooth function of the school

## **6.5 Added value in education: SABIS®/ISF mission statement**

As per 2006 the ISF (Internationale Schule Frankfurt-Rhein-Main, Member of the SABIS® School Network) has the following mission statement: 'to be recognized as a provider of top quality education to a highly diverse student body. It will prepare students for success in college, equip them with the ability and desire for lifelong learning, and strengthen their civic, ethical, and moral values. ISF will maintain high standards of efficiency and accountability throughout its operation.'

At ISF, the students are also encouraged to adopt the following principles:

- Always try
- Do your best
- Manage yourself
- Treat others with respect
- Cooperate and actively help others
- Respect the property and rights of others
- All students should be prepared for university and a life of continuous learning.
- All students should be helped to realize their full potential, empowering them to make informed decisions in life.
- All students should grow in confidence and self-esteem; the maximum possible 'value' should be added to all aspects of each student's education.
- All students should be encouraged to become well-rounded citizens who contribute positively to their communities.

Achieving academic excellence and acceptance to top universities is a priority of the ISF Internationale Schule Frankfurt-Rhein-Main. Students and parents who share the values and aspirations of the school are at the right school. Together with the support of parents and the students' willingness to work, ISF spares no effort to ensure that each and every student achieves his or her full potential.

## **6.6 Relative Importance of SABIS Student Life Organization® for the added value of the system**

According to the official web-site of ISF:

The SABIS Student Life Organization® (SABIS® SLO™), a distinctive and integral part of ISF Internationale Schule Frankfurt-Rhein-Main, gives students the opportunity to develop 'life' skills that empower them to make a substantial commitment, not only to their own personal development, but to that of their community.

The SABIS® SLO™ is the students' mini-society. Each individual is encouraged to contribute to help create an atmosphere of respect and care. The specifics of the SABIS® SLO™ program are implemented by a prefect system. Prefects who are carefully selected--not elected--manage the SABIS® SLO™. All students are encouraged to join in Student Life and to take an active part in their education, academic and non-academic. By working in co-operation with, and complementing the efforts of, the administration and academic staff, prefects add even more value to themselves. Prefects help to raise the general standard all around them; they promote high social and moral values; they encourage participation in a wide range of additional activities and sports.

Through the SABIS Student Life Organization® at ISF, students are helped to become responsible and caring citizens through learning in order to:

- Encourage positive attitudes
- Improve general standards
- Promote constructive thinking
- Experience real-life work and responsibilities
- Improve their communication and social skills

The SABIS Student Life Organization® at ISF is an important part of every classroom. Teams comprised of a Class Prefect and Group Leaders provide immediate help to their classmates. After a teacher has presented a concept and an accompanying exercise, these Prefects check the work of students in their groups and assist the teacher in locating and filling learning gaps.

The SABIS Student Life Organization® at ISF sponsors a multitude of different weekly activities both during the school day and after school. These activities include: many competitive team sports in co-operation with the school's local 'Sportverein,' arts and crafts, ballet and dance, drama, band, choir, private music lessons, Tae Kwan do yoga and much more. Involvement in all aspects of life at ISF helps students acquire and refine skills, attitudes and attributes that give them an advantage in college and beyond. Top universities from around the world are eager to attract and accept those students who have acquired a broad base of such abilities and experiences

The statistics below show different aspects of the SABIS Student Life Organization®:



6.6.1 English

Grade 5

Total # AMS <sup>32</sup>	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
342	318	24	18	11	7
	92.98%	7.02%		61.11%	38.89%

Last year

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
692	632	60	60	49	11
	91.33%	8.67%		81.67%	18.33%

Grade 6

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
523	488	35	30	13	17
	93.31%	6.69%		43.33%	56.67%

Last year

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
823	720	103	103	78	25
	87.48%	12.52%		75.73%	24.27%

Grade 7

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
489	343	146	97	41	56
	70.14%	29.86%		42.27%	57.73%

Last year

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
	No data	No data		No data	No data

<sup>32</sup> AMS: SABIS Academic Monitoring System\* (computerized tests which assess the progress of the students on weekly basis in various subjects)

**Grade 8**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
388	254	134	130	44	86
	65.46%	34.54%		33.85%	66.15%

**Last year**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
No data	No data	No data	No data	No data	No data

**Grade 9**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
387	344	43	35	15	20
	88.89%	11.11%		42.86%	57.14%

**Last year**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
No data	No data	No data	No data	No data	No data

**6.6.2 Mathematics:****Grade 5**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
342	318	24	18	11	7
	92.98%	7.02%		61.11%	38.89%

**Last year**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
692	632	60	60	49	11
	91.33%	8.67%		81.67%	18.33%

**Grade 6**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
523	488	35	30	13	17
	93.31%	6.69%		43.33%	56.67%

**Last year**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
823	720	103	103	78	25
	87.48%	12.52%		75.73%	24.27%

**Grade 7**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
489	343	146	97	41	56
	70.14%	29.86%		42.27%	57.73%

**Last year**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
	No data	No data		No data	No data

**Grade 8**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
388	254	134	130	44	86
	65.46%	34.54%		33.85%	66.15%

**Last year**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
	No data	No data		No data	No data

**Grade 9**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
387	344	43	35	15	20
	88.89%	11.11%		42.86%	57.14%

**Last year**

Total # AMS	AMS Passes	AMS Fails	Total # Re-takes	Re-take Passes	Re-take Fails
	No data	No data		No data	No data

### 6.6.3 Activities:

Specific Activity	F	M	Total	% F	% M
Arts/Crafts	57	21	78	73.08%	26.92%
Badminton	13	7	20	65.00%	35.00%
Ballet	7	4	11	63.64%	36.36%
Basketball	27	57	84	32.14%	67.86%
Board/Card Games	21	48	69	30.43%	69.57%
Cartoon	9	9	18	50.00%	50.00%
Cheerl.	18	4	22	81.82%	18.18%
Chess	4	3	7	57.14%	42.86%
Choir	22	6	28	78.57%	21.43%
Comm. Service	30	11	41	73.17%	26.83%
Computer	2	2	4	50.00%	50.00%
Creative Writing	10	1	11	90.91%	9.09%
Dance	19	4	23	82.61%	17.39%
Discipline	19	43	62	30.65%	69.35%
Discussion	4	6	10	40.00%	60.00%
Drama	27	15	42	64.29%	35.71%
Environment	20	26	46	43.48%	56.52%
Football	0	37	37	0.00%	100.00%
French	2	6	8	25.00%	75.00%
Games	5	15	20	25.00%	75.00%
Golf	0	6	6	0.00%	100.00%
Gymnastics	12	3	15	80.00%	20.00%
Hindi	0	1	1	0.00%	100.00%
Hlstory	4	12	16	25.00%	75.00%
Italian	7	7	14	50.00%	50.00%
Martial Art	12	11	23	52.17%	47.83%
Music	39	49	88	44.32%	55.68%
Needlework	6	3	9	66.67%	33.33%
Reading	3	4	7	42.86%	57.14%
Sch. Environment	43	8	51	84.31%	15.69%
School Publ.	26	20	46	56.52%	43.48%
Scouts	2	1	3	66.67%	33.33%
Soccer	21	88	109	19.27%	80.73%
Spanish	2	1	3	66.67%	33.33%
Special Interest	12	30	42	28.57%	71.43%
St. Lf. Admin.	33	60	93	35.48%	64.52%

Specific Activity	F	M	Total	% F	% M
Study Leader	38	23	61	62.30%	37.70%
Study Member	84	100	184	45.65%	54.35%
Swim/Dive	36	27	63	57.14%	42.86%
Table tennis	3	59	62	4.84%	95.16%
Tennis	23	28	51	45.10%	54.90%
Track/Field	14	10	24	58.33%	41.67%
Volleyball	44	31	75	58.67%	41.33%
Yearbook	20	29	49	40.82%	59.18%
Yoga	5	3	8	62.50%	37.50%

#### 6.6.4 Activities by Nationality:

Specific Activity	German	Korean	American	Others	Total	% German	% Korean	% American	% Others
Arts/Crafts	18	27	10	23	78	23.08%	34.62%	12.82%	29.49%
Badminton	10	6	0	4	20	50.00%	30.00%	0.00%	20.00%
Ballet	8	0	2	1	11	72.73%	0.00%	18.18%	9.09%
Basketball	21	9	18	36	84	25.00%	10.71%	21.43%	42.86%
Board/Card Games	17	21	5	26	69	24.64%	30.43%	7.25%	37.68%
Cartoon	8	2	2	6	18	44.44%	11.11%	11.11%	33.33%
Cheerl.	7	0	3	12	22	31.82%	0.00%	13.64%	54.55%
Chess	2	4	0	1	7	28.57%	57.14%	0.00%	14.29%
Choir	9	7	3	9	28	32.14%	25.00%	10.71%	32.14%
Comm. Service	7	14	3	17	41	17.07%	34.15%	7.32%	41.46%
Computer	1	3	0	0	4	25.00%	75.00%	0.00%	0.00%
Creative Writing	4	2	3	2	11	36.36%	18.18%	27.27%	18.18%
Dance	13	0	2	8	23	56.52%	0.00%	8.70%	34.78%
Discipline	28	6	5	23	62	45.16%	9.68%	8.06%	37.10%
Discussion	2	1	1	6	10	20.00%	10.00%	10.00%	60.00%
Drama	13	1	8	20	42	30.95%	2.38%	19.05%	47.62%
Environment	16	13	3	14	46	34.78%	28.26%	6.52%	30.43%
Foosball	16	1	10	10	37	43.24%	2.70%	27.03%	27.03%
French	3	1	0	4	8	37.50%	12.50%	0.00%	50.00%
Games	15	0	1	4	20	75.00%	0.00%	5.00%	20.00%
Golf	2	2	0	2	6	33.33%	33.33%	0.00%	33.33%
Gymnastics	5	0	3	7	15	33.33%	0.00%	20.00%	46.67%
Hindi	1	0	0	0	1	100.00%	0.00%	0.00%	0.00%
History	1	7	3	5	16	6.25%	43.75%	18.75%	31.25%
Italian	5	1	3	5	14	35.71%	7.14%	21.43%	35.71%

Specific Activity	German	Korean	American	Others	Total	% German	% Korean	% American	% Others
Martial Art	7	0	5	11	23	30.43%	0.00%	21.74%	47.83%
Music	34	12	9	33	88	38.64%	13.64%	10.23%	37.50%
Needlework	2	5	2	0	9	22.22%	55.56%	22.22%	0.00%
Reading	0	4	1	2	7	0.00%	57.14%	14.29%	28.57%
Sch. Environment	15	11	5	20	51	29.41%	21.57%	9.80%	39.22%
School Publ.	13	12	5	16	46	28.26%	26.09%	10.87%	34.78%
Scouts	0	0	2	1	3	0.00%	0.00%	66.67%	33.33%
Soccer	56	11	10	32	109	51.38%	10.09%	9.17%	29.36%
Spanish	0	0	0	3	3	0.00%	0.00%	0.00%	100.00%
Special Interest	11	11	9	11	42	26.19%	26.19%	21.43%	26.19%
St. Lf. Adm'n.	40	16	5	32	93	43.01%	17.20%	5.38%	34.41%
Study Leader	27	11	7	16	61	44.26%	18.03%	11.48%	26.23%
Study Member	74	40	21	49	184	40.22%	21.74%	11.41%	26.63%
Swim/Dive	21	6	5	31	63	33.33%	9.52%	7.94%	49.21%
Table tennis	22	15	4	21	62	35.48%	24.19%	6.45%	33.87%
Tennis	15	9	3	24	51	29.41%	17.65%	5.88%	47.06%
Track/Field	8	0	5	11	24	33.33%	0.00%	20.83%	45.83%
Volleyball	34	6	9	26	75	45.33%	8.00%	12.00%	34.67%
Yearbook	20	6	6	17	49	40.82%	12.24%	12.24%	34.69%
Yoga	2	3	0	3	8	25.00%	37.50%	0.00%	37.50%

### 6.6.5 Activities by grade:

Specific Activity	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Total	% Grade 5	% Grade 6	% Grade 7	% Grade 8	% Grade 9
Arts/Crafts	45	12	4	11	6	78	57.69%	15.38%	5.13%	14.10%	7.69%
Badminton	0	0	0	13	7	20	0.00%	0.00%	0.00%	65.00%	35.00%
Ballet	10	1	0	0	0	11	90.91%	9.09%	0.00%	0.00%	0.00%
Basketball	16	23	15	14	16	84	19.05%	27.38%	17.86%	16.67%	19.05%
Board/Card Games	31	17	0	9	12	69	44.93%	24.64%	0.00%	13.04%	17.39%
Cartoon	6	12	0	0	0	18	33.33%	66.67%	0.00%	0.00%	0.00%
Cheer L.	0	0	9	1	12	22	0.00%	0.00%	40.91%	4.55%	54.55%
Chess	0	0	0	0	7	7	0.00%	0.00%	0.00%	0.00%	100.00%
Choir	12	10	5	0	1	28	42.86%	35.71%	17.86%	0.00%	3.57%
Comm. Service	0	0	17	17	7	41	0.00%	0.00%	41.46%	41.46%	17.07%
Computer	0	0	0	4	0	4	0.00%	0.00%	0.00%	100.00%	0.00%
Creative Writing	0	0	2	3	6	11	0.00%	0.00%	18.18%	27.27%	54.55%

Specific Activity	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Total	% Grade 5	% Grade 6	% Grade 7	% Grade 8	% Grade 9
Dance	7	0	12	4	0	23	30.43%	0.00%	52.17%	17.39%	0.00%
Discipline	13	10	14	12	13	62	20.97%	16.13%	22.58%	19.35%	20.97%
Discussion	0	0	0	7	3	10	0.00%	0.00%	0.00%	70.00%	30.00%
Drama	6	8	9	12	7	42	14.29%	19.05%	21.43%	28.57%	16.67%
Environment	0	0	12	30	4	46	0.00%	0.00%	26.09%	65.22%	8.70%
Football	11	11	0	0	15	37	29.73%	29.73%	0.00%	0.00%	40.54%
French	0	5	0	3	0	8	0.00%	62.50%	0.00%	37.50%	0.00%
Games	0	0	0	0	20	20	0.00%	0.00%	0.00%	0.00%	100.00%
Golf	3	2	0	0	1	6	50.00%	33.33%	0.00%	0.00%	16.67%
Gymnastics	12	3	0	0	0	15	80.00%	20.00%	0.00%	0.00%	0.00%
Hindi	1	0	0	0	0	1	100.00%	0.00%	0.00%	0.00%	0.00%
History	9	7	0	0	0	16	56.25%	43.75%	0.00%	0.00%	0.00%
Italian	9	5	0	0	0	14	64.29%	35.71%	0.00%	0.00%	0.00%
Martial Art	12	10	0	1	0	23	52.17%	43.48%	0.00%	4.35%	0.00%
Music	15	11	34	19	9	88	17.05%	12.50%	38.64%	21.59%	10.23%
Needlework	0	0	5	2	2	9	0.00%	0.00%	55.56%	22.22%	22.22%
Reading	1	6	0	0	0	7	14.29%	85.71%	0.00%	0.00%	0.00%
Seb.	13	12	12	9	5	51	25.49%	23.53%	23.53%	17.65%	9.80%
Environment											
School Publ.	0	0	19	14	13	46	0.00%	0.00%	41.30%	30.43%	28.26%
Scouts	1	2	0	0	0	3	33.33%	66.67%	0.00%	0.00%	0.00%
Soccer	17	30	25	22	15	109	15.60%	27.52%	22.94%	20.18%	13.76%
Spanish	1	2	0	0	0	3	33.33%	66.67%	0.00%	0.00%	0.00%
Special	4	15	12	8	3	42	9.52%	35.71%	28.57%	19.05%	7.14%
Interest											
St. L.f. Admin.	23	26	14	15	15	93	24.73%	27.96%	15.05%	16.13%	16.13%
Study Leader	2	9	14	10	26	61	3.28%	14.75%	22.95%	16.39%	42.62%
Study Member	17	37	41	44	45	184	9.24%	20.11%	22.28%	23.91%	24.46%
Swim/Dive	17	21	13	8	4	63	26.98%	33.33%	20.63%	12.70%	6.35%
Table tennis	8	45	0	9	0	62	12.90%	72.58%	0.00%	14.52%	0.00%
Tennis	13	13	8	12	5	51	25.49%	25.49%	15.69%	23.53%	9.80%
Track/Field	10	6	5	1	2	24	41.67%	25.00%	20.83%	4.17%	8.33%
Volleyball	0	23	25	16	11	75	0.00%	30.67%	33.33%	21.33%	14.67%
Yearbook	4	10	20	9	6	49	8.16%	20.41%	40.82%	18.37%	12.24%
Yoga	3	5	0	0	0	8	37.50%	62.50%	0.00%	0.00%	0.00%

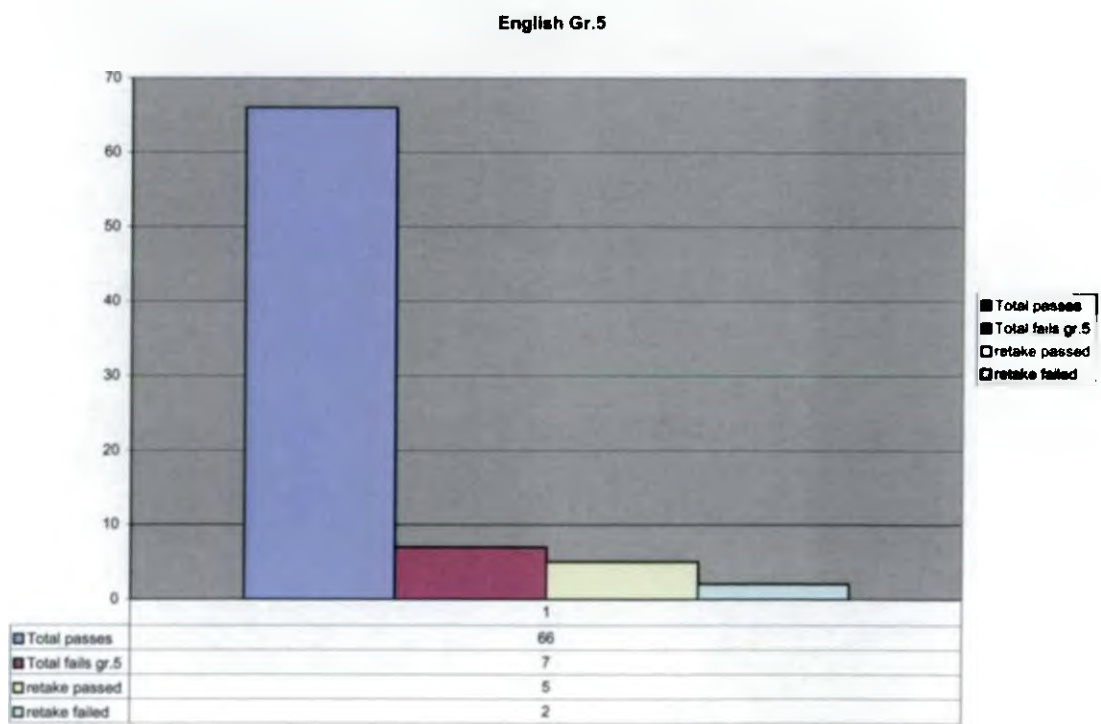


### 6.6.6 Activities: commitment:

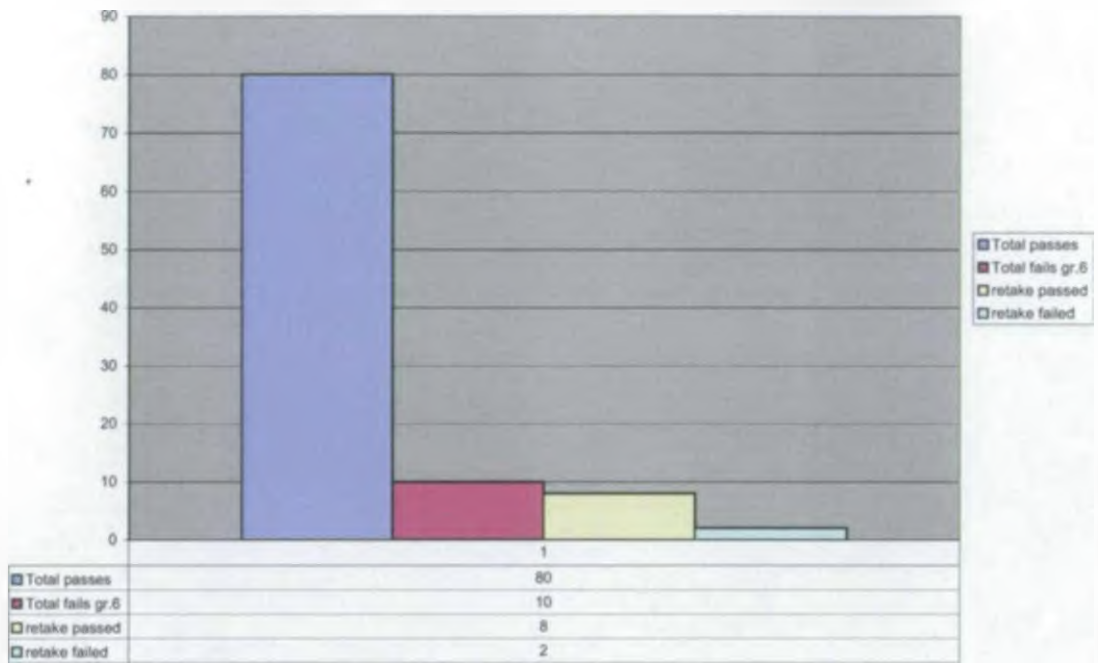
<u>Participation</u>		<u>ISF</u>	
<u>Statistics</u>		<u>(GE)</u>	
<u>Total # of Students</u>		<u>898</u>	
<u>Total # PS</u>		<u>590</u>	
<u>Total # SS</u>		<u>308</u>	
<u>All SL Activities</u>			
	Primary School	465	79%
	Secondary School	285	43%
Primary School			
	Academic Dept.	23	4%
	Discipline Dept.	22	4%
	Mgmt. Dept.	145	25%
	Sports Dept.	2	0%
	Activities Dept.	20	3%
	Outreach Dept.	2	0%
	LS Department	0	0%
Secondary School			
	Academic Dept.	99	32%
	Discipline Dept.	19	6%
	Mgmt. Dept.	87	28%
	Sports Dept.	8	3%
	Activities Dept.	43	14%
	Outreach Dept.	36	12%



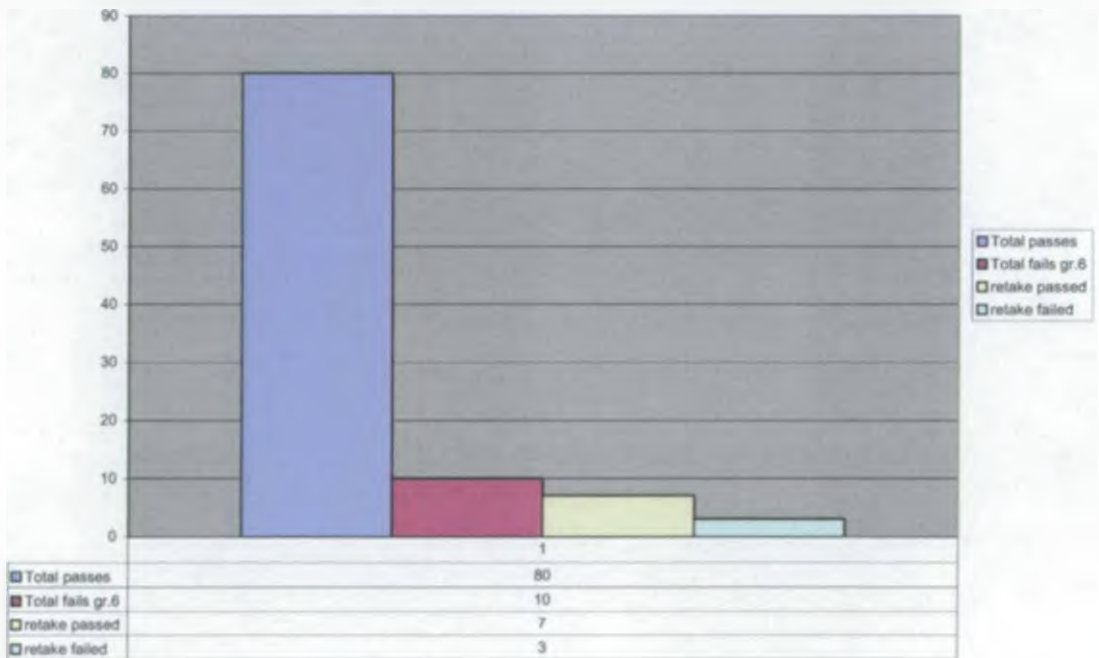
6.6.7 Results of students after peer tutoring or study buddies



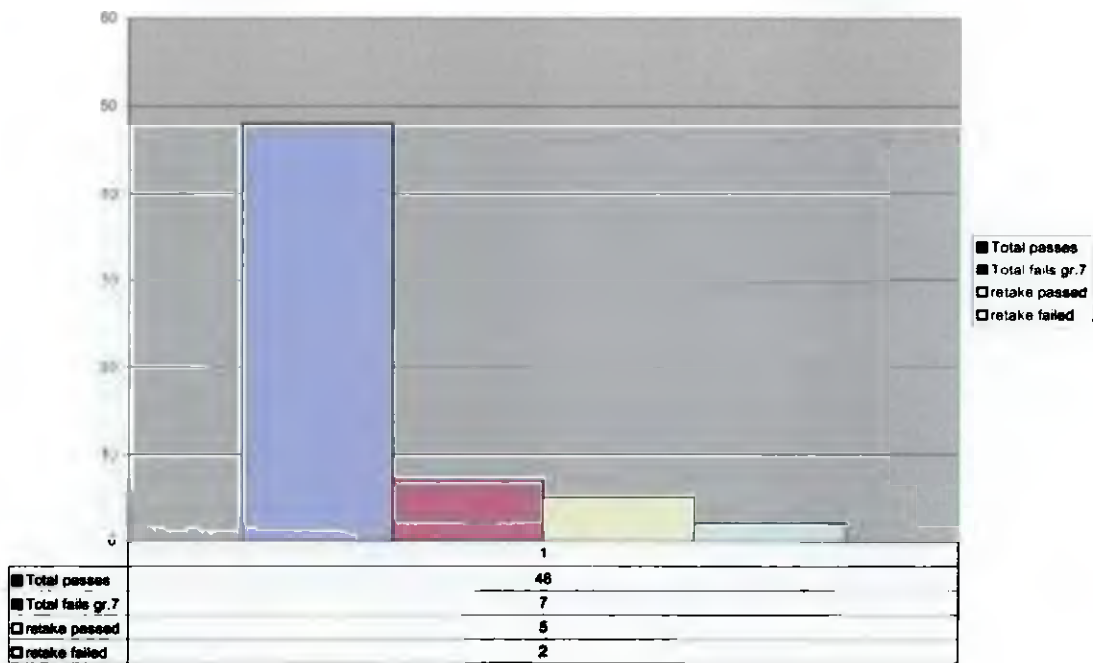
### Math Gr.6



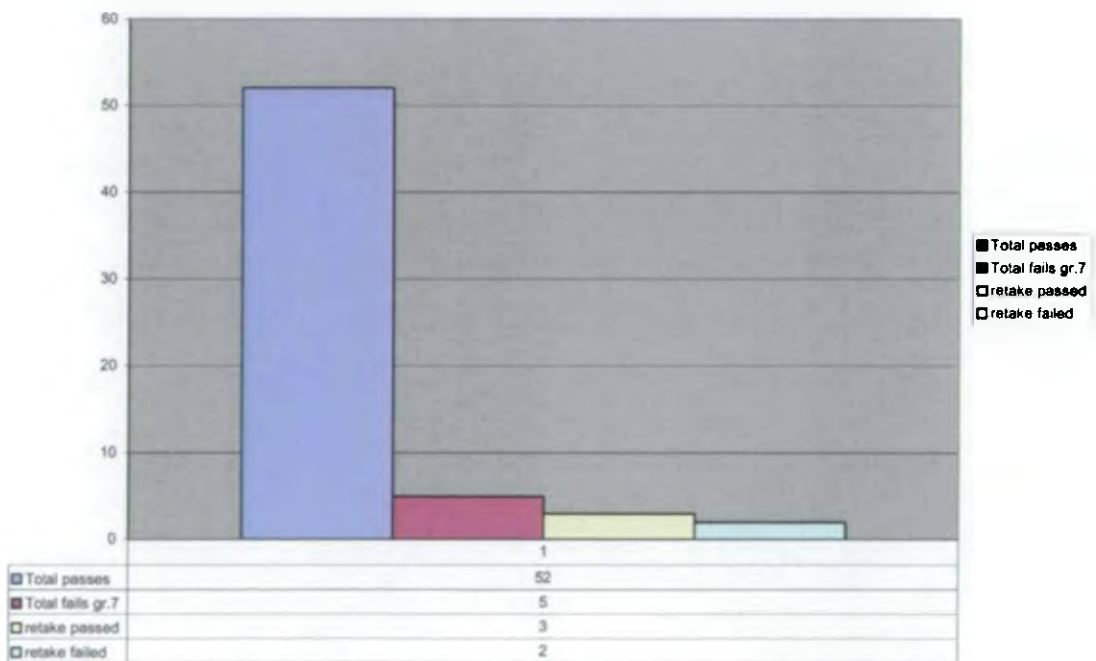
### English



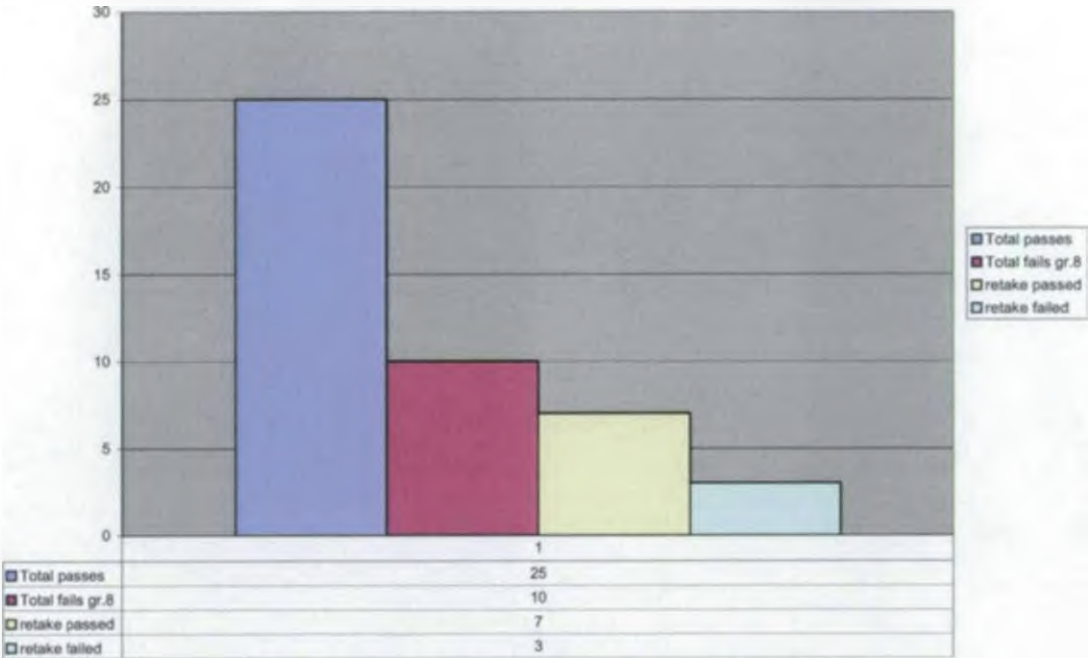
Math GR.7



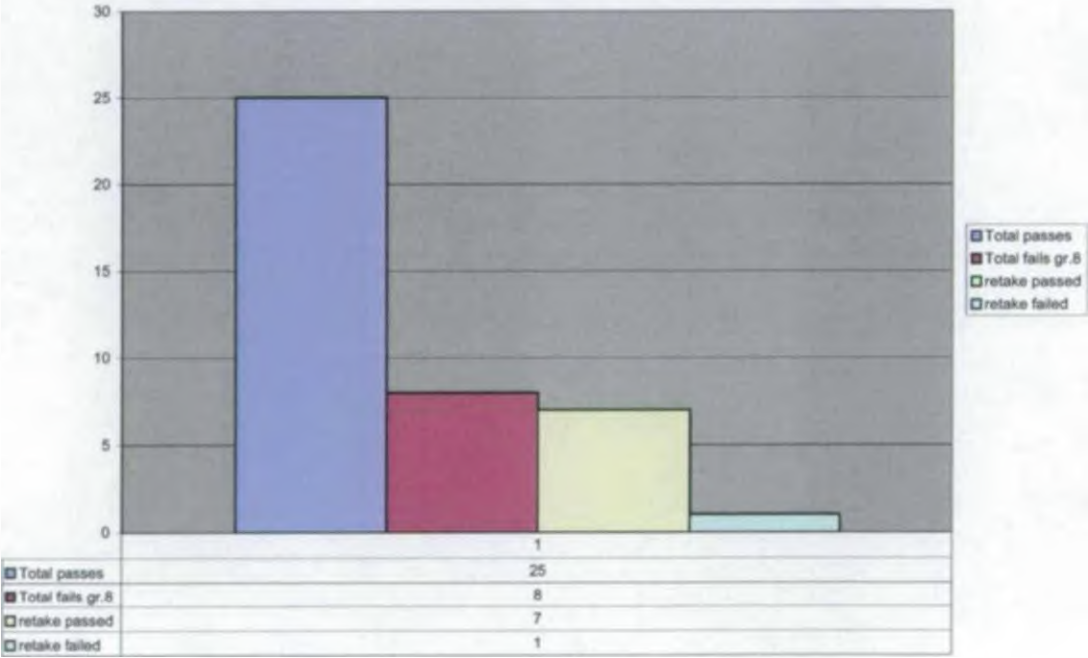
English gr.7



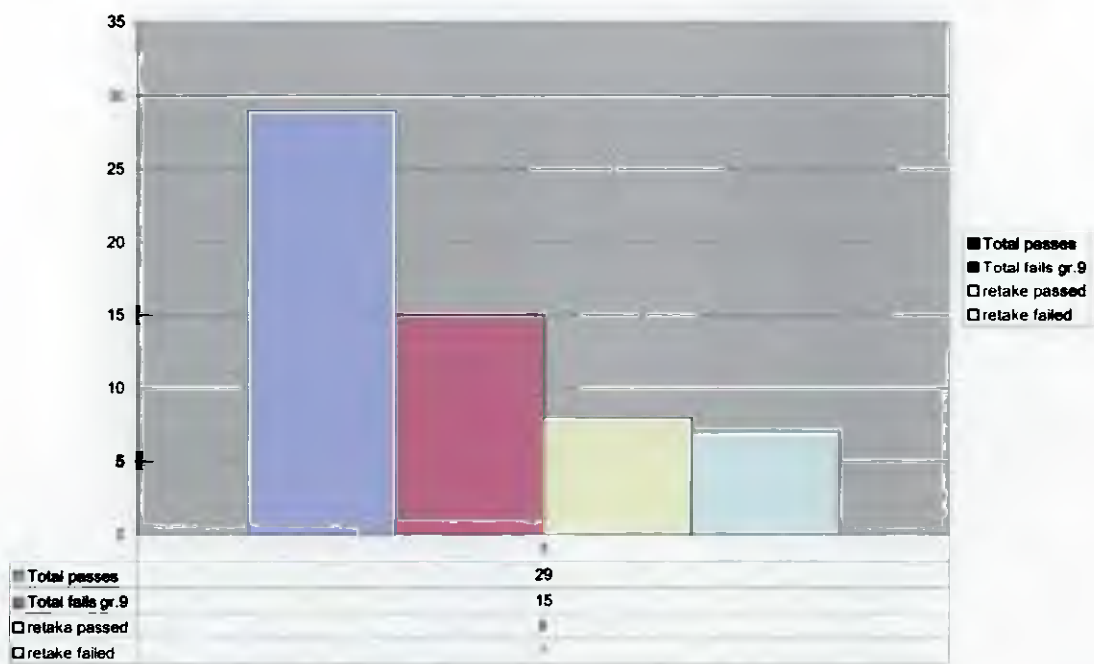
Math gr.8



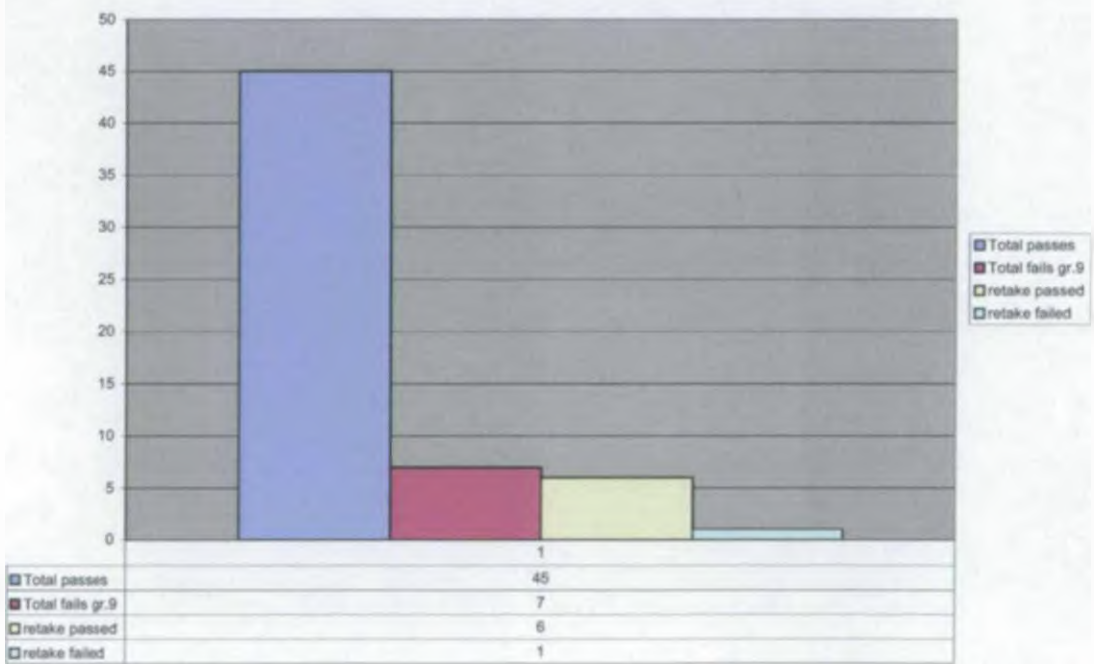
English Gr.8



Maths Grade 9



English gr.9



### 6.6.7 Summary from sections 6.6.1 to 6.6.7

Table	Description	Conclusions	Possible Academic added value	Possible Social added value
6.6.1	<ul style="list-style-type: none"> <li>Grades 5, 6, 7, 8, 9</li> <li>Two year period</li> <li>#of students who participated, passed or failed the English AMS and retake</li> </ul>	At a very high percentage the students finally master the concepts taught.	YES	
6.6.2	<ul style="list-style-type: none"> <li>Grades 5, 6, 7, 8, 9</li> <li>Two year period</li> <li>#of students who participated, passed or failed the Mathematics AMS and retake</li> </ul>	At a very high percentage the students finally master the concepts taught.	YES	
6.6.3	Activities per gender for one academic year for grades 5 to 9	Large number of activities offered. Very high percentage of the student body involved.	YES	YES
6.6.4	Activities by nationality for one academic year for grades 5 to 9	Promotion of internationalism	YES	YES
6.6.5	Activities by grade (5 to9)  One academic year	The majority of the students were involved	YES	YES
6.6.6	Activities commitment.  One academic year	The secondary students are more eager to participate in activities. Some departments do not look attractive for the student body	YES	YES
6.6.7	Results of students after peer tutoring or study buddies in Math and English Grades 5 to 9)	Students acting as tutors achieve better results than the teaching staff	YES	YES

The SABIS Student Life Organization® is a vital component of the ISF school community. The above statistics show the level of involvement of the students in the development of the personality of the school. It is very interesting that the students can sometimes achieve better academic results than the teaching staff (see 6.6.8) when they are working as peer tutors. Even though the terminology used during these sessions is not very traditional, the enthusiasm of the students overcomes the lack of experience and transmits motivation to the peers. Students who are actively involved in the SLO™ program improve their academic results because in order to teach, they are indirectly obliged to study and deepen their knowledge. Socially the outcome is often impressive. Children who were very shy or isolated when they first joined the school became more open, started taking initiatives and after leaving ISF have reported that their participation helped them to mature faster and gave them various skills (communication, presentation, conflict resolution, managing people and materials) invaluable for their lives.

The feedback the school receives from the parents is very positive. ISF as International School has expatriates as the majority of its population. Those families come from abroad and have no social connections others than the school and the professional environment of the parents. For the above-mentioned reasons the indoor activities offered by the school are for a certain period the only source of social contacts and developments for those students. Another parameter of the positive contribution of that program for the school community is the fact that the school provides activities or care till 18:00 o'clock every day and the students can be picked up latest by 19:00. This facility gives to the parents more flexibility but also the children spend their time in a fruitful way in a safe environment.

The successful implementation of the SLO™ program is also highly depended on the various facilities that are offered in the campus: the library, the computer labs, the tennis courts, the indoor swimming pool, the stadium, the theater, the music and video rooms. For example the existence of high quality sport facilities is a pole of attraction for the local community that uses them for the Sport Verein (association) activities. As a result the students have contact with the local population and this part of the program establishes a good relationship between the school and the community.



As a general conclusion my research shows that the SABIS Student Life Organization® fulfills its role as a positive contributor to the social and academic added value. It facilitates the promotion of team spirit, equips the students with various skills, reinforces their motivation and supports the weaker students to improve their academic results. Later, we are going to discuss the areas where there is room for improvement.

## **6.7 Relative importance of the Student Management Office for the added value of the school**

In the majority of the schools discipline is exclusively the responsibility of the teaching staff. In the SABIS® School Network there is a different philosophy about how the management of the students should take place. Every teacher is responsible to maintain his classroom management but is not allowed to punish any student. He reports the incident and the Student Management Office will decide about the consequences based on certain rules.

According to the official SABIS® website:

A<sup>33</sup> high level of discipline is expected at all times. Students are encouraged to understand and appreciate the many benefits to be derived from respecting rules. They are also encouraged to be considerate towards others and take care of their surroundings. However, if disciplinary codes are contravened, students are held accountable. Punishments are mandatory and there are no exceptions. SABIS® has set guidelines for disciplinary matters; punishment is not however automatic. Detention is the most commonly used form of punishment and students may be detained within school hours, after school or during week-ends. If detention does not result in improved behaviour, the Head Supervisor confers with the Director who also interacts, as required, with the appropriate Academic Coordinator, the Student Life Coordinator and the Heads of Department in an effort to ascertain the root of the problem and take the most appropriate action. All members of the staff are expected to contribute to disciplinary standards actively, by enforcing the rules, and passively, by always setting a good example.

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<sup>33</sup> <http://www.isf-sabis.net/SHEET1.pdf>



How the teaching community does see the problem of class management? It is interesting that the majority agrees that there are fourteen "truths"<sup>34</sup> related to classroom management<sup>35</sup>:

- Lasting change takes time.
- You cannot make anyone do anything.
- Behavior is a symptom of a larger issue.
- Reacting to a problem generally escalates the problem, while being proactive usually helps to de-escalate or avoid the problem in the first place.
- Consistency is the key!
- If students are engaged, they are not causing trouble.
- You can win the battle but lose the war. Choose your battles wisely.
- Parents can be allies or enemies.
- Assigning blame is ineffective.
- Children need structure.
- Students rise or fall according to our expectations.
- If you fail to plan, you plan to fail.
- Do unto others, as you would have them do unto you.
- We all make mistakes.

Howard Seeman, author of *Preventing Classroom Discipline Problems: A Classroom Management Handbook* writes: No matter how well a teacher knows the subject matter or how well he or she can teach, a teacher who cannot manage a class is finished!"

At ISF the majority of the parents finds the discipline satisfactory<sup>36</sup> and agrees that a peaceful community guarantees better quality of education. The students have their own perspective. As a member of the staff I am constantly witness of the adjustment of the newcomers to the new environment. After a short period of time they adopt the code of behavior followed by the others. The psychology of the mass works perfectly. However,

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<sup>34</sup> Ellen Berg, Language Arts teacher, Turner middle school

<sup>35</sup> Interviews conducted with teaching staff

<sup>36</sup> ISF has been recognized as a very successful school in terms of discipline. The Hessen state sends students to this school for a certain amount of time in order to improve their social and academic skills (Sozialamt, Hessen). In the past other International schools have sent students to ISF for the same reason

the implementation of the strict discipline rules has two different aspects. Firstly students with very bad behavior history usually change their attitude and become active and positive contributors to the school community. Secondly, those members of the staff who do not have the ability or the experience to implement the rules in a reasonable manner make the discipline system less effective, less well accepted and respected. As human history shows during some periods and in certain areas rules are followed blindly without an appropriate analysis of the facts. Every school is a small part of the humanity. Therefore there are people with different approaches, abilities, characters. At ISF those members of the staff who are successful and highly respected by students and parents are those who face no problems in managing their classes. On the other hand others move their responsibility to the Student management Office by assigning negative points for minor infractions. As a result the students do not take seriously the teacher and further the discipline system.

From the teachers point of view it is important to have support from the system regarding the delicate issue of discipline. In serious incidents they avoid the direct confrontation with the students and in case they were mistaken more people will be involved, e.g. the SMO coordinator, the SLO™ coordinator, the Director and the Heads of Departments. The above structure guarantees in theory a fair conclusion for every incident. In reality the system has a lot of room for improvement. The huge workload given to the members of the SMO has as a result a lot of cases is overlooked. Another factor that seems to influence the implementation of this system is the lack of experience of a considerable amount of members of the staff. Teachers who are doing their first steps in the field of education at ISF they have suddenly to face a very complicated situation: a rigorous, bureaucratic and extremely demanding workload combined with certain guidance or training in the area of discipline.

The analysis of the number of infractions given by the teachers reveals a very interesting parameter. Members of the staff who are coming from certain countries implement the rules consistently but without thinking. As we all know this attitude may be very dangerous in the longer term. Respecting the law is different than ignoring the momentum of the incident or the human approach to mistakes that every civilized community should show. The students spend in the school campus a considerable amount of hours on daily basis. The influence of this environment is vital for their lives

since they learn how to behave, how to accept their responsibility and its consequences but also how to forgive those who made mistakes. Regulations created in offices by managers will never replace inspired and loyal teachers. A system that is not successful in that area but has excellent academic results did not achieve the main goal of the education: a solid foundation for better future citizens of the world.

## Further conclusions

The table below is a quick synopsis of what has been discussed:

Parameter	Findings	Added value
The academic results	The percentage of students who fail in internal or external exams is low. The school is not selective	Yes
The choice of different subjects	ISF offers 9 courses per grade level. Emphasis in Mathematics and English	Improvement is required
The standards of the curriculum	The curriculum has been designed according to the expectations of the external exams the school offers	Improvement is required
The frequent monitoring of student progress	The results of the external and internal exams prove that the frequent testing is beneficial to the students. The most important part of the monitoring is the follow up procedure which includes study groups, meetings with students and parents and individual fostering.	Yes
The school facilities	ISF offers a very high standard of facilities (library, computer labs, theater, indoor swimming pool, football stadium, tennis courts and equipment for a very big number of sports). It is very often the host for a lot of tournaments among International Schools	yes

The activities/events offered by the school community	A variety of activities is offered by the school. Almost all students are involved in activities	Yes
The role of the students in the school community	The students are active members of the school community as they run the SABIS Student Life Organization®	Yes
The appreciation of other cultures	The SLO™ activities and the group work in every course promote the appreciation of other cultures.	Yes
Discipline/safe and orderly environment	No extreme cases of discipline identified (13 years). Other schools send students to ISF to benefit from its atmosphere	Yes
Focus on continuation in higher education	All members of the school community work in this direction	Yes
Acceptances to Universities/Climate of high expectations	The internal data shows that the vast majority of the students who graduate enter their first choice University	Yes
Instructional leadership/ Contribution of educators	The administrative and teaching staff create a climate of confidence among the members of the school community	Yes

**Note:** No comparison with competitive schools has been made as this was beyond the scope of my project.

From the feedback (see chapter 5) gotten from potential customers I arrived to the conclusion that 24.4% of them choose a private school because they believe that the standards of the German Educational system are not high enough. A similar percentage (26.7%) presumes that an International School will offer added value to the education of their children. The most significant reasons for parents that a school is a good choice are the excellent academic results and the good reputation of the school. In both cases the percentage of those opinions was 16-17%. The social added value is expected to be given to the students via the various courses where skills, truths, values and new perspectives will be explored. Additionally, the team work appears for 14% of the parents a key factor for the added value a school promises. The academic added value results for 18% of the customers from the individual fostering and for the 22% from the language skills.

According to the official data of the school, the student population comes from 48 different countries. Germany, Korea and USA have the largest groups of students. There is a balance between boys and girls, even though the number of boys is slightly bigger.

One main concern of parents and staff is the fact that ISF has a big turn over of the staff. As I have mentioned before every two years especially those teachers who come from USA go back because of tax reasons. The average internal scores by grade for the period 2002-2005 give an indication that during the first year the new teachers struggle with the material and the workload but the second year there is a significant improvement. To mention that these diagrams do not take into consideration the different level of the students for 2 consecutive years. According to studies that have been developed in ISF, one year has strong students and the consecutive has weaker ones. No logical explanation has been set so far to that phenomenon.

The percentages of graduates who have been accepted to Higher Education are between 75 and 100%.

## 6.8.1 Statistical analysis of academic results

### AP results 2007

Scores:	5 + 4 + 3		ISF sample size
	ISF %	World %	
Human geography	87.5	50.6	8
German language	100.0	68.4	36
Calculus AB	95.7	75.4	23
Chemistry	88.8	77.9	9
Physics C Elec & magnet.	81.9	71.2	11
Macroeconomics	86.9	79.5	23
Physics C Mechan.	72.7	71.3	11
Spanish lang. standard	66.6	71.7	9
Microeconomics	72.7	84.3	22
Spanish lang	70.0	82.6	10
Biology	56.4	72.0	16

### Success

2003	A*, A, B, C		ISF sample size
	ISF	World	
German foreign language	100.0	88.0	32
Spanish foreign language	100.0	92.7	10
English 2nd language	100.0	60.3	8
English 1st language	100.0	69.1	7
French foreign language	100.0	85.1	7
English literature	100.0	71.2	7
German 1st language	100.0	74.9	6
Physics	100.0	77.2	6
Chemistry	100.0	71.5	3
Mathematics	85.7	61.4	28
Art and design	83.4	63.0	6
Hlstory	75.0	62.2	4
Biology	50.0	68.0	8
Computer science	50.0	38.2	2
Economics	44.4	64.1	9

Source for World - IGCSE 2003:

[www.cie.org.uk/docs/qualifications/igcse/June%202003.pdf](http://www.cie.org.uk/docs/qualifications/igcse/June%202003.pdf)

ISF 2002-03 IGCSE Results									
Course Title	A*	A	B	C	D	E	F		
Art		1		4	1			6	Done
Biology			2	2	1		3	8	Done
Chemistry			1	2				3	
Economics			2	2	3	2		9	Done
2nd Lang. English		2	5	1				8	Done
1st Lang. English	1	1	3	2				7	Done
1st Lang. German		1	2	3				6	Done
For. Lang. French		5	2					7	Done
For. Lang German	20	8	4					32	Done
For. Lang. Spanish	1	3	5	1				10	Done
English Lit.		1	2	4				7	Done
Maths	3	9	8	4	4			28	Done
Physics			2	4				6	Done
Comp. Science			1		1			2	
History		1		2		1		4	Done
Totals	25	32	39	31	10	3	3	143	

Course Title	A*	A	B	C	D	E	F	
Art	0.0%	16.7%	0.0%	66.7%	16.7%	0.0%	0.0%	100.0%
Biology	0.0%	0.0%	25.0%	25.0%	12.5%	0.0%	37.5%	100.0%
Chemistry	0.0%	0.0%	33.3%	66.7%	0.0%	0.0%	0.0%	100.0%
Economics	0.0%	0.0%	22.2%	22.2%	33.3%	22.2%	0.0%	100.0%
2nd Lang. English	0.0%	25.0%	62.5%	12.5%	0.0%	0.0%	0.0%	100.0%
1st Lang. English	14.3%	14.3%	42.9%	28.6%	0.0%	0.0%	0.0%	100.0%
1st Lang. German	0.0%	16.7%	33.3%	50.0%	0.0%	0.0%	0.0%	100.0%
For. Lang. French	0.0%	71.4%	28.6%	0.0%	0.0%	0.0%	0.0%	100.0%
For. Lang German	62.5%	25.0%	12.5%	0.0%	0.0%	0.0%	0.0%	100.0%
For. Lang. Spanish	10.0%	30.0%	50.0%	10.0%	0.0%	0.0%	0.0%	100.0%
English Lit.	0.0%	14.3%	28.6%	57.1%	0.0%	0.0%	0.0%	100.0%
Maths	10.7%	32.1%	28.6%	14.3%	14.3%	0.0%	0.0%	100.0%
Physics	0.0%	0.0%	33.3%	66.7%	0.0%	0.0%	0.0%	100.0%
Comp. Science	0.0%	0.0%	50.0%	0.0%	50.0%	0.0%	0.0%	100.0%
History	0.0%	25.0%	0.0%	50.0%	0.0%	25.0%	0.0%	100.0%



In the following sections a statistical analysis is performed, comparing the IGCSE results and AP results between the ISF and the overall population. The two years of reference, for which data were available, were 2003 (ICGSE) and 2007 (AP) respectively.

### 6.8.2 Evaluating ISF performance using the IGCSE/2003 scores

The table below presents the percentages of successful students (scores A\*, A, B, C) of (i) the ISF and (ii) the total population (“world”). The data are sorted in descending order using the ISF percentage as the sorting criterion. The table shows a clear superiority in the scores achieved by the ISF students. In most subjects 100% of the ISF students were “successful”, exceeding the corresponding success percentage of the total population. Only in “biology” and “economics” the ISF performance was found poorer than the “world”.

2003	A*, A, B, C		ISF sample size
	ISF	World	
German foreign language	100.0	88.0	32
Spanish foreign language	100.0	92.7	10
English 2nd language	100.0	60.3	8
English 1st language	100.0	69.1	7
French foreign language	100.0	85.1	7
English literature	100.0	71.2	7
German 1st language	100.0	74.9	6
Physics	100.0	77.2	6
Chemistry	100.0	71.5	3
Mathematics	85.7	61.4	28
Art and design	83.4	63.0	6
History	75.0	62.2	4
Computer science	50.0	38.2	2
Biology	50.0	68.0	8
Economics	44.4	64.1	9

Also, the table below, presenting more detailed (cumulative) scores, shows a clear superiority in the scores achieved by the ISF students in several subjects (e.g. in mathematics 42.8% of the ISF students being examined in maths obtained scores A\* and A, while only 21.3% of the general population achieved these scores). However, in order to establish a solid conclusion about the role of the SABIS® system in influencing students' knowledge, analytical skills and performance, which are elements contributing to a significantly superior performance; a thorough statistical analysis is needed. For this, statistical inference techniques have been used here, based on the existing data and evidence for all subjects shown on the table below. Chemistry and Computer Science were not included in the analysis, due to the corresponding very small (ISF) sample size (n=3 and n=2, respectively).

### IGCSE results 2003

	A*, A		A*, A, B		A*, A, B, C		ISF sample size
	ISF %	World %	ISF %	World %	ISF %	World %	
Mathematics	42.8	21.3	71.4	38.7	85.7	61.4	28
English 1st language	28.6	17.0	71.5	40.8	100.0	69.1	7
English 2nd language	25.0	11.2	87.5	33.9	100.0	60.3	8
German 1st language	16.7	18.7	50.0	40.9	100.0	74.9	6
German foreign language	87.5	51.2	100.0	65.7	100.0	88.0	32
French foreign language	71.4	42.9	100.0	62.8	100.0	85.1	7
Spanish foreign language	40.0	73.3	90.0	80.7	100.0	92.7	10
English literature	14.3	15.8	42.9	42.2	100.0	71.2	7
Physics	0.0	33.3	33.3	53.8	100.0	77.2	6
History	25.0	21.6	25.0	42.5	75.0	62.2	4
Chemistry	0.0	29.8	33.3	48.8	100.0	71.5	3
Biology	0.0	23.1	25.0	43.7	50.0	68.0	8
Art and design	16.7	18.1	16.7	38.5	83.4	63.0	6
Economics	0.0	20.7	22.2	42.2	44.4	64.1	9
Computer science	0.0	5.2	50.0	14.2	50.0	38.2	2

The data collected from the ISF IGCSE results for 2003 do not exceed 35 observations per subject. For this reason we acknowledge that the ISF samples are “small” and, thus, the t-test is applicable. Due to the extremely small size of the ISF sample, as compared to the overall population (“world”), the ISF results cannot influence the overall results: thus, the two populations (ISF sample and “world”) can safely be considered independent and there are no theoretical obstacles to apply the t-test. The statistical tests used here involved the comparison between the results obtained by the ISF students and the results of the overall population in terms of average score.

**6.8.3 Comparisons using the average IGCSE scores**

ISF students’ and population’s (“world”) scores were coded according to the following table:

A*, A	B	C	D	E	F+G
5	4	3	2	1	0

The raw data/scores of the ISF students were used to calculate the mean and the sample standard deviation. The data of the table shown above (table titled “IGCSE results 2003”) were used to calculate the mean, per subject, for the “world”. These data, together with additional (calculated) statistical indicators, are shown in the table below:

### 6.8.3 Comparing and controlling the ISF performance vis-à-vis the "world" [1] - IGCSE results (2003) –

**Hypothesis testing** -  $H_0: \bar{x} \leq \mu_0$  ;  $H_A: \bar{x} > \mu_0$

Subject	ISF			World  mean $\mu_0$	(calculated)  t statistic	t critical value (5%)	H <sub>0</sub> rejected; H <sub>A</sub> accepted
	n	mean $\bar{x}$	st.dev. s				
Subjects for which significant differences have been observed (H <sub>A</sub> accepted):							
Foreign language German	32	4.88	0.34	3.99	14.82	1.696	Yes
Second language English	8	4.13	0.64	2.87	5.55	1.895	Yes
Foreign language French	7	4.71	0.49	3.81	4.91	1.943	Yes
Mathematics	28	4.00	1.09	3.07	4.52	1.701	Yes
First language English	7	4.00	0.82	3.19	2.61	1.943	Yes
Subjects for which there are no significant differences (H <sub>0</sub> not rejected):							
English literature	7	3.57	0.79	3.17	1.36	1.943	No
First language German	6	3.67	0.82	3.40	0.81	2.015	No
Art	6	3.17	0.98	2.94	0.56	2.015	No
History	4	3.00	1.63	2.95	0.07	2.353	No
Foreign language Spanish	10	4.30	0.67	4.43	-0.63	1.833	No
Physics	6	3.33	0.52	3.43	-0.46	2.015	No
Biology	8	2.00	1.77	3.05	-1.67	1.895	No
Economics	9	2.44	1.13	3.22	-2.06	1.860	No

The Student t statistic, shown in the sixth column ("calculated t statistic"), has been calculated using the formula:

$$t = \frac{\bar{x} - \mu_0}{s / \sqrt{n}}$$

where, for each subject (=first column), n is the number of ISF students examined (second column), of  $\bar{x}$  is the average performance of the ISF students (third column), s is the corresponding (sample) standard deviation (fourth column) and  $\mu_0$  is the corresponding overall ("world") average performance (fifth column).

The contents of the sixth column are then compared with the t-critical values from the standard "t" tables ( $\alpha=0.05$ , degrees of freedom= $n-1$ ). We adopt the following hypothesis scheme (null hypothesis and alternative hypothesis, respectively):

$H_0: \bar{x} \leq \mu_0$  (the ISF students perform the same or worse than the "world")

$H_A: \bar{x} > \mu_0$  (the ISF students perform significantly better than the "world")

## Conclusion

Where the calculated t statistic exceeds the t critical value, it is concluded that the ISF students' superiority in their performance (as compared with the performance of the "world") is, indeed, statistically significant, the null hypothesis is rejected and the alternative hypothesis is accepted. Therefore, for "foreign language German", "second language English", "foreign language French", "Mathematics" and "first language English", it is concluded that the ISF students have performed, indeed, significantly better than the "world".

For the other subjects the null hypothesis is accepted (no superiority of the ISF performance), either because the superiority of the ISF performance is not sufficiently significant (English literature, first language German, Art, History) or because the ISF students had even an inferior performance than the average. In the latter case though, the difference from the "world" was not statistically different in most subjects (Foreign language Spanish, Physics, Biology) and only in one case the ISF students' performance was significantly inferior than the "world" (subject: Economics).

**6.8.4 Evaluating ISF performance using the AP 2007 scores**

Similarly to the previous overall comparison, as shown on the table below, in most subjects the ISF students had a more “successful” performance (scores 5, 4, 3) in the AP tests than the overall population (with the exception of Spanish, microeconomics and biology). The rows are sorted in order of difference of the % successful percentage between the ISF students and the overall population. E.g. “human geography” was the subject in which the ISF students showed at most their superiority vis-à-vis the overall population; and “biology” was their worst subject.

	Scores: 5 + 4 + 3		ISF sample size
	ISF %	World %	
Human geography	87.5	50.6	8
German language	100.0	68.4	36
Calculus AB	95.7	75.4	23
Chemistry	88.8	77.9	9
Physics C Elec & magnet.	81.9	71.2	11
Macroeconomics	86.9	79.5	23
Physics C Mechan.	72.7	71.3	11
Spanish lang. standard	66.6	71.7	9
Microeconomics	72.7	84.3	22
Spanish lang	70.0	82.6	10
Biology	56.4	72.0	16

This first glance impression needs to be also evaluated using hypothesis testing.

The sample size also here is rather limited, with n=36 observations being the maximum number of observations available (subject: German language). Smaller sample sizes are available for the other subjects. It follows that the ISF samples have to be considered “small” and, again, the t-test is applicable.

Scores:	5		4		3		2		1		ISF sample size
	ISF %	World %	ISF %	World %	ISF %	World %	ISF %	World %	ISF %	World %	
<b>Biology</b>	18.8	32.4	18.8	21.9	18.8	17.7	37.5	17.7	6.3	10.2	16
<b>Calculus AB</b>	69.6	40.8	17.4	17.8	8.7	16.8	0	11.6	4.3	13	23
<b>Chemistry</b>	44.4	34.7	22.2	24.3	22.2	18.9	11.1	11.7	0	10.5	9
<b>German laoguage</b>	88.9	25.8	8.3	21.6	2.8	21	0	18.7	0	12.9	36
<b>Human geography</b>	37.5	11.1	12.5	17.8	37.5	21.7	0	16.3	12.5	33.1	8
<b>Macro economics</b>	34.8	29.8	30.4	33.3	21.7	16.4	8.7	11.9	4.3	8.5	23
<b>Microecoo mics</b>	36.4	31.5	22.7	34.5	13.6	18.3	22.7	8.6	4.5	7	22
<b>Physics C Elec &amp; magnet.</b>	45.5	33.6	9.1	25.5	27.3	12.1	18.2	16.9	0	11.9	11
<b>Physics C Mechan.</b>	54.5	26	18.2	25.3	0	20	9.1	14.1	18.2	14.6	11
<b>Spanish lang. standard</b>	22.2	25.4	11.1	25.4	33.3	20.9	22.2	18.6	11.1	9.6	9
<b>Spanish lang.</b>	30	48.4	10	21.4	30	12.8	20	11.1	10	6.3	10

The table above illustrates the results per grade (in the columns). The cells show the percentages achieved by each group ("ISF" and "world"). Due to a very small sample size, the following subjects were excluded from the table and from the tests:

English Literature & Composition (n=1), Computer science (n=1), Calculus BC (n=1), Environmental science (n=2), French Language Standard Group (n=1), French Language (n=3), Government & Politics – Composition (n=1), European History (n=3).



The following table presents the results of the hypothesis testing.

It was assumed:

- Null hypothesis:

$H_0: \bar{x} \leq \mu_0$  corresponds to accepting that “The ISF students’ average performance ( $\bar{x}$ ) is the same or inferior to the overall population”.

- Alternative hypothesis:

$H_A: \bar{x} > \mu_0$  corresponds to accepting that “The ISF students’ average performance ( $\bar{x}$ ) is superior to the overall population”.

As before the standard t-statistic formula was used:

$$t = \frac{\bar{x} - \mu_0}{s / \sqrt{n}}$$

The green areas (cells) indicate the rows (and corresponding subjects) where a statistically significant superiority of the ISF students was found (t-statistics greater than the t-critical value at 5% probability to wrongly reject the  $H_0$ -hypothesis about the equality of the two means).

The yellow areas (cells) indicate rows (and corresponding subjects) for which there was an observed/perceived superiority of the ISF students; however this was not possible to be proven statistically.

For the other four subjects the ISF students’ performance was poorer than the “world” (however, not statistically significant, since still  $|t\text{-statistic}| < t\text{-critical value}$ ).



### 6.8.5 Comparing and controlling the ISF performance vis-à-vis the "world" [2] - AP results (2007) -

**Hypothesis testing** -  $H_0: \bar{x} \leq \mu_0$  ;  $H_A: \bar{x} > \mu_0$

Subject	ISF			mean (world)	t-statistic (calculated)	t critical value (df, 5%)	H <sub>0</sub> rejected; H <sub>A</sub> accepted
	n	mean	st.dev.				
Subjects for which significant differences have been observed:							
German language	36	4.81	0.71	3.29	12.83	1.690	Yes
Calculus AB	23	4.48	0.99	3.62	4.15	1.717	Yes
Human geography	8	3.63	1.41	2.58	2.11	1.895	Yes
Subjects for which there are no significant differences:							
Chemistry	9	4.00	1.12	3.61	1.05	1.860	No
Physics C Mechan.	11	3.82	1.66	3.34	0.95	1.812	No
Macroeconomics	23	3.83	1.15	3.64	0.77	1.717	No
Physics C Elec & magnetism	11	3.82	1.25	3.52	0.79	1.812	No
Microeconomics	22	3.64	1.33	3.75	-0.40	1.721	No
Spanish lang. standard	9	3.11	1.36	3.38	-0.60	1.860	No
Biology	16	3.06	1.29	3.49	-1.32	1.753	No
Spanish language	10	3.30	1.42	3.95	-1.44	1.833	No

It follows that for German, Mathematics and Human Geography there was a statistically significant superiority in the performance of the ISF students. For half of the other subjects there was still an observed superiority; however this was not statistically significant.

## 6.9 Suggestions

As it occurs in almost every country a private school has snob- appeal and often is the first choice of wealthy people. ISF is not the exception to the rule. It operates in one of the strongest financial environments worldwide. Companies, Embassies and individuals invest on average 13, 000 Euros per year per student. Does ISF maximise the profit for its students? According to my study there are a lot of areas where undoubtedly the implementation of the SABIS<sup>®</sup> system, offers added value to its students. The diagram below shows the average number of students at ISF during the academic years 2004-2006:



The number of students in Kindergarten and primary were 647.

The above diagram shows that a significant number of students left after grade 10. The results of the external exams (AP, IGCSE) are very good in comparison to worldwide results.

If the students achieve so good results in external exams which are the reasons for which the parents of almost 40% of the students withdraw them from ISF? Possible answers are:

- The curriculum is unsatisfactory for the students who attend the upper grades.
- The entry requirements for the German Universities are achievable by a minority of students. More precisely the routes offered by the ISF involve very difficult subjects. For example the English Literature was very tuff, especially for non-native speakers. Where did those students continue their school career? The majority of them went to the other big International School in Frankfurt which offers the IB Diploma.

The above analysis shows that the customers of the International Schools stop trusting a school if they see that their children risk to earn access to Universities. The data of 2006-07 shows that only 15% of the students are leaving ISF after year 10. This is the result of the implementation of the IB programme at ISF from 2007-8 as well.

One of my main objectives when I had started this project was to investigate those areas where the school could improve its efficiency. ISF as member of SABIS® BIS benefits from the experience of school policy makers who are working in the field of the education for more than a century. However a network of schools that operates in a big range of different countries needs continuous feedback in order to elaborate new policies that reflect the needs and the demands of the local communities.

**Project work and oral participation is not part of the SABIS® system:** In the field of education there is an ongoing discussion about project or non project oriented curricula. SABIS® did not encourage project work believing that students could benefit more from a rigid and very structured system that has very concrete outcomes. However, in University level studies projects are essential part of the work and assessments. Those students who do not have previous experience in developing projects face serious difficulties. There is probably no definite answer to what we define as project. Some educators believe that exchanging ideas in the classroom is project work. Nevertheless structured projects maximise the learning outcomes, the decision making abilities, and the language content and reinforce the real-life skills. They require certain guidance from the part of the teachers and the end result is often authenticity of experience, improved language and content knowledge, increased awareness, enhanced critical thinking and decision-making abilities, intensity of motivation and engagement, improved social skills, and a familiarity with target resources. The introduction of the IB programme from the academic year 2007-08 is a step of ISF in that direction. Its students are used to a very structured curriculum will have now the opportunity to extend their skills. As IB coordinator I have already started working in that field. With my staff we develop pacing charts and prepare the areas in which our students will start developing their Extended Essays as part of their work for the IB Diploma.

The oral participation of the students is limited in the SABIS® system. Course work is not part of the marks the students receive during the school year. Therefore the participation or the non participation of a student in the daily classes is not registered or reported SABIS® does not want to have course work as part of the assessment believing that the marks of the students should be given in an unbiased way. As a result the students do not develop strong presentation skills which are essential for their careers. The question of whether the adaptation of a mainly student-centered approach would be appropriate especially in Asia (origin of SABIS), where are still basically teacher-centered is often raised. Many Asian teachers wonder how many students can learn from such experience because oral presentations take quite a large of amount of class time. An obvious gap between the current level of performance and the intended learning experience often results in a breakdown of language production and frustration for students.

However, oral presentation is an effective communicative activity that has been widely adopted by some teachers to promote oral proficiency. However, when oral presentations are assigned in class, the teacher will get either complete silence or grumbles from students who find the idea of oral presentations frustrating and intimidating. Students are overwhelmed with the research and communication skills that are necessary for a successful presentation. Some serious students who invest time and effort into an oral presentation do not always get the intended outcomes. Other students try to get through the ordeal as quickly as possible, but do not improve their speaking skills under such stressful situations. Thus oral presentations can be a time-consuming project with no guarantee of a satisfactory performance.

The need for establishing a comfortable and low-threat learning environment, from the perspective of learning outcomes acquisition, has long been emphasized and recognized. The less anxious and more relaxed the learner, the better language acquisition proceeds. The delivery of an oral presentation is a source of extreme anxiety. Anxiety causes performance to deteriorate and affects novice speakers' self-esteem and confidence. Particularly for Asian students, oral presentations are a face-threatening activity (Jane King, Soochow University, Taiwan).

The ISF community has recently started to have the oral presentations as part of the English curriculum. The implementation of the IB programme requires coursework and oral presentations for every subject. In that direction all teachers who will deliver the IB curriculum are trained accordingly.

**Group work benefits students who are bright but may not have the social skills or are too shy to get involved in class.** The Group work is essential part of the SABIS® system. The teacher explains a concept and the students have time to discuss it and answer the corresponding assignments. Every group involves ideally four students from which one is the group leader, responsible to check the work of the group and ask the teacher questions. During the years I am working as a Math teacher in ISF I was numerous times witness of outstanding progress students made under the guidance of their classmates. It is true though that all students are not in favour of that system. Students who are lazy do not work and prefer to copy the answers from their peers. Those who are shy do not want to become group leaders and rarely ask questions to their classmates or the teacher. On the other hand group work does not apply to every class environment. In the upper secondary the students are almost adults and they want to decide how and with whom to work. Generally, group work is a useful tool in the hands of the teachers but only very experienced teachers can exploit the full potential from its implementation. During training sessions I have with the members of the Math Department I try to emphasize the benefits of having students doing team work. Some of the guidelines I give are:

- The feedback from the colleagues who were working with your students the year before is very useful but you must remember that your students are a year older, therefore different.
- Try diverse seating plans during the year. Show confidence to your students and create a pleasant environment where they do not feel threatened or bored.
- Accept that some students will never be active members of the class community because of their character and/or abilities. Find alternative ways for approaching them.
- Creativity and flexibility are only two of the many charismas a successful teacher has. The implementation of the group work requires both.

**Entering ISF at a higher grade/ age becomes more difficult than joining at an early age.** There is a variety of reasons for families moving home and children changing schools. For some families, moving schools follows a lifestyle choice, for others it is a response to a change of factors. It is important to remember that all students experience change and movement to some extent as they progress from each year level, to the next throughout their school career. While in many instances this is socially appropriate, there is also evidence to suggest that some children and young people are at risk of developing problems. School transition has often been associated in research studies with a lowering in self-esteem and self-efficacy, physiological distress and decreases in academic achievement. (Eccles and Bucharan, 1994)

The International Schools have to integrate a considerable number of newcomers every year. ISF welcomes about 100-130 new students per year. The majority of them come up to grade 9. Less than 20 newcomers join the Upper Secondary. For those students ISF has in place the team of ambassador students who welcome the newcomers and try to integrate them to the school community. Knowing that the ambassadors are not always very successful because in many cases cliques have been already formed, not open to new members and despite the efforts of the school sometimes prejudiced against certain races and nationalities. One of my first priorities as upper secondary Coordinator from the academic year 2007-08 is to implement some new strategies in order to support and keep the new students engaged:

- Introduction of lunchtime activities where the students will introduce to each other and ease their transition to new social groups.
- Welcomes at school assemblies.
- Encouraging existing families to approach new families in the area.
- Identification of a key figure in a cultural group to provide information and assistance to the new arrivals.
- Active involvement of the Homeroom teachers to the integration of the new students to the school community.
- Ongoing contact with the parents over the first weeks to monitor the student's transition and adjustment.

- Class routines, class rules and learning outcomes should be clearly and explicitly stated and explained to help new students to adjust more quickly and settle into the ISF and class routine.
- The students will be asked to complete a profile of them, including a photo, a list of their interests and the places they have visited.
- The quick engagement of the new student to the SLO™ programme is expected to facilitate his/her integration.
- Strict and rigorous implementation of the school policy against prejudice. Cases where students show prejudice behaviour and obstruct the smooth integration of newcomers will be addressed in a prudent fashion.

**For some students the strict and compelled learning experience is too much to handle.** The Internationale Schule Frankfurt-Rhein-Main (ISF) is well known as a very demanding, structured and disciplined community. The curricula followed especially in sciences are quite advanced in comparison to various national educational systems. The last 7 years I am responsible for every placement test in Mathematics from grades 7 to 13. A high percentage of students are placed at least one year behind their request. The reason is that the material covered in the previous schools was not sufficiently extended and the students need to build a solid foundation in order to be integrated to the SABIS® system. The instruction usually takes place in a very intense pacing chart. The majority of the students manage to handle the workload but there are also students who struggle continuously. As a teacher I have often ask myself:

- Should we teach this huge amount of concepts at a very short time?
- Do the students really absorb the knowledge so quickly?
- Even though the results of the tests are satisfactory do our students really benefit from this programme?

The educational community discusses these matters quite often and the answers are contradictory. However almost everybody agrees that nowadays the students have to face an increasing competition not only regarding the University entry requirements but also in the work market. The private schools have to satisfy the petition of their customers for entrance in the Higher Education. ISF is one of those schools. Every year there is a long list of good to excellent universities that accept its students. The process

through the years the students attend ISF is sometimes painful. There are students who feel depressed or lose their self esteem because the system rejects them if they fail. The tools the school have in place in order to assist the weaker students, like study groups, peer tutoring or intensive classes sometimes fails completely. Even though those students are a small minority could not be ignored. A system has to add value to every member of its community.

My proposals to that problem include:

- Active involvement of the students in every course.
- Maintenance of the smallest classes possible.

During the orientation of the staff and the departmental meetings the principals need to stretch the importance of the following:

- Avoid lecturing.
- Do demonstrations
- Have students do small-scale experiments
- Show videos or computer simulations
- Engage in discussion.
- Give personal attention to every student and make the appropriate adjustments that will pousse all students to participate and get involved in the learning process.

**Some claim that the placement tests focus on a student's academic ability only. The emotional maturity is not taken into consideration. An interview process may be more helpful rather than a placement test, as this will be able to identify a student's social and communicational skills.** Every student who wishes to join the ISF has to pass placement tests in Mathematics and English. For the upper secondary school there is an interview with the Director and additional placement tests in various subjects which determine the course selections of the student. It is true that the placement tests as they are set up till now reflect the academic ability of the student but



only partially. The experienced teachers face rarely difficulties in assessing correctly a student. However, there have been cases where students under perform for various reasons; e.g. they resist in the decision of their family to change school or the stress they develop as they write the tests prevent them from answering all the questions they know. The transcripts of the students are frequently a very useful tool. There is no doubt that if every student who has to sit placement tests had the possibility of having several interviews with various members of the staff then probably the school could have avoided accepting some students who proved to be problematic for the school community. It is obvious though that the placement tests are very much time consuming. The involvement of more people in the process could have resulted into bigger bureaucracy and heavier workload. The introduction of the IB programme as per August 2007 is an additional reason for me as Coordinator to be careful with the process of the placement tests. During the school year 2006-07 I made a lot of changes in the content of the various placement tests as they must now reflect a certain foundation. Every student will have in the future an interview with me and his family where the following points will be analysed in depth:

- Academic and social profile of the student.
- Plans for studies (countries, field of studies)
- Course selection

**Academic evaluation is not always a mirror to a child's knowledge:**

Lorrie Shepard who is professor of Education in the University of Colorado has written a lot of very interesting articles about the assessment of students. I think that it is almost impossible for somebody to disagree with the fact that 'the features of an assessment must be tailored to match the purpose of the assessment. Using the term assessment presents an opportunity to step away from past practices and ask why we should try to measure what children know and can do. Developmentally inappropriate instructional practices, characterized by long periods of seatwork, high levels of stress, and a plethora of fill-in-the-blank worksheets placed many children at risk by setting standards for attention span, social maturity and academic productivity that could not be met by many pupils.'

The continuous monitoring of the progress of the students is one of the key features of the SABIS® system. The students are tested on weekly basis in Mathematics and English; they have at least 2-3 exams that cover the material of some weeks in every subject. The teachers do not give any grade to their students for class work. The supporters of this method claim that the students get only objective feedback, the students and their parents are informed immediately for potential weaknesses and the teachers can re-teach the areas where the gaps were identified. The results of the external exams show that this system does not fail to support the students during their school career. However, particularly in the Internationale Schule Frankfurt-Rhein-Main during the first 12 years of operation of the school only a very small group of students had decided to stay till the graduation. This has happened for various reasons.

According to a recent research of the administration and the Marketing Department the students and their families in the upper grades did not find the system attractive because was involving very difficult entry requirements for the University (e.g. advanced placement test in English Language for non-native speakers). My research had shown that the school community feels that the components of course and project work were the main weaknesses of the system. In addition I found that monitoring system works only partially. The teachers do not have the time or the experience to review the material where the students show gaps, the tests include trivial and in certain cases inappropriate questions.

In this field it looks as if there is a contradiction. On the one hand the system has in place some tools which are meant to help the students but on the other hand the staff that has to use those tools is often inexperienced or unwilling to follow the given guidelines. On top of the above the contemporary way of thinking in education goes beyond the traditional instruction and testing methods and explores the communication skills of the students, their individual potential and creativity. In that respect there are a lot to be done in the SABIS® system. The implementation of the same tests in all SABIS® schools gives general feedback to the administrators about the accomplishment of the basic principles of the method. They have the possibility to cross check results and come to conclusions about their staff. The advantage is that young teachers are able to maintain an acceptable level as they have to follow in every school the same lesson plans and their students sit the same tests. The system identifies academic gaps but does

not support the development of presentation and communication skills in the classroom which are so crucial for the life today. Also the academic results are the only ones that count and courses like art, music, and sports do not recognized as important part of the programme but they are enrichment courses with no weight for the report cards of the students.

One of my main goals as educator is to approach every student as a unique individual. I understand that it is not realistic for a school to offer a different programme to each of the students as this requires vast financial and human resources. However I believe that it is the responsibility of the administrators and the senior teachers to be actively involved in the implementation of instructional and assessment methods that support the balanced development of the personality and the health of the students. Undoubtedly one of the missions of all educators is to apply the say of the Ancient Greeks: 'A healthy brain lives always in a healthy body'.

One question that frequently parents and teachers ask me is: Is there any chance for changes in a system like SABIS® where almost every step seems to have already been decided? My answer is: yes. The changes are happening but they have to be well justified and planned. It would have been equally dangerous if the Organization was making changes only by following various fashions. Which steps could I take as teacher and administrator in order to improve the system for the benefit of the school community?

- Train the new teachers on weekly basis.
- Introduce mentor teachers who will support the newcomers inside and outside the school.
- Organize regular conferences with other administrators, senior teachers and the staff that is responsible for preparing the exams where creative feedback should be given about the development of better assessments.
- Introduction of special sessions where our students will be given training about how they should work in various projects.
- The introduction of the IB programme will cause a lot of changes in the curriculum and assessment methods.

- Change of the policy regarding the weak academically students. Till now those students who were failing in certain courses were not allowed to participate in tournaments. In my opinion this measure is not beneficial for the students, since for some of them those tournaments are maybe their only chance to achieve something outstanding which enhances their self-esteem.
- Full support will be given to those of our students who participate in various performances.
- As coordinator I plan to organize frequent meetings with every student where different aspects of the school life will be discussed. My intention is to maximize the chances of every student for success.

**The role of the SLO™:** The role of the SLO™ in the SABIS® system is fundamental. It is considered as a unique element of all SABIS® schools and recently was recognized as trade mark. As I have already explained the students run various activities academic and non academic. In an ideal situation every student should be involved in the various activities. The target of this programme is to promote collaboration, fraternity, solidarity and friendship among the members of the school community and to open opportunities for development of the social, managerial, communication and presentation of the pupils. As my case study shows the above goals have been achieved for the majority of the students who have been actively involved in that programme for long time. However the goal is that every student participates in some SLO™ activities and shares this amazing experience with his/her classmates.

As an experienced member of the staff I have noted the weak areas of the SLO™ and in my first priorities as Upper Secondary Coordinator will be to upgrade its role in the school life for the students in the grades 10 to 13. In the past years the students had their timetable full with their academic subjects and often there was no time available for SLO™ activities. As a result the school community could not benefit from the more mature students. There is no doubt that the IB Diploma offers a golden opportunity to all students as it is mandatory for all to fulfill at least 150 hours of CAS (creativity, action, service) during the two years of the IB diploma. The following actions are included in my immediate plans:

- Exploration of new possible activities for the students.
- Active involvement of the students with the local community.
- Integration of the SLO™ activities in the students' timetables
- Maximum possible interaction of all students who are in different grade levels.
- Incentives for members of the staff who would like to offer or help in various activities.
- Organization of assemblies where the students will discuss with other stakeholders the foundation, promotion and evaluation of the programme.
- Organization of training sessions for students, parents or teachers who were assigned to run activities in order to safeguard the best outcome from doings.
- Frequent meetings with the parent network where the parents will be informed about the different components of the SLO™ programme and their active support and participation will be requested.
- Meetings with special educational psychologists will be organized for gathering consultancy regarding those students who have a problematic social behavior and research ways for their active involvement in the programme.
- Organization of bonding trips for the older students which will promote the reinforcement of the ties among them and guarantee that they feel the ownership of the school.
- Continuous monitoring of all activities to reassure that they are effective and add value to the school community.

**Teaching Staff:** One of the fundamental problems ISF faces is the high turn over of the staff. According to the official school statistics every second year the school loses about 35% of its teaching staff. The reasons were explained in previous part of this project. My data shows that some years the average of some grade levels was reduced significantly and there was a raise of the marks the year after. In the majority of those cases the teacher or teachers were new and often totally inexperienced or with very little experience. The biggest problem appears in the Science and Math departments. As Department Head of Mathematics I had to train about 30 teachers during the 7 years of my career at ISF. It is interesting that in grades 10 to 13 the majority of the teachers are

either permanent members of the staff or relatively experienced (minimum 2 years of teaching experience in a percentage 80%<sup>37</sup>). In some subjects e.g. Mathematics the results of the external exams are outstanding irrelevant of the level of the course or the quality and quantity of students during the last 6 years. We need to mention that a very experienced teacher was responsible for those students from grade 10 to 13. In other areas numbers show the same pattern. A successful teacher is the pillar of the system.

Nowadays it becomes more and more difficult for the International education to find and keep good teachers. In the case of the ISF it is absolutely necessary for the administration to take measures in order to ensure that the quality of the education offered to the students is satisfactory and reinforces the reputation of the school. The highly competitive environment where the school operates demands a well designed strategy from all stake holders. If the school is not able to keep its teachers for a longer term or attract the best ones has to urgently implement effective and drastic steps such as:

- Provide incentives: e.g. attractive salary, cheap accommodation, bonuses for outstanding performance.
- Teachers and administrators must become a collaborative school community.
- Teachers must become members of a number of teaching and learning communities that reportedly sustained them in their efforts.
- Collaboration in teaching can be a major reason for success.
- Peer<sup>38</sup> coaching, teaming, and program consistency are mentioned in different researches as aspects of collaboration that teachers valued.
- To help all students achieve at high levels in every subject, teachers need to teach with an instructional emphasis on complex thinking as well as basic skills. Langer (2001)
- All Department Heads must provide their staff with continuous, effective coaching.

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<sup>37</sup> All the data presented in this section was taken from the official school records

<sup>38</sup> Consortium for Responsible School Change in Literacy  
Sponsored by Minnesota Center for Reading Research at the University of Minnesota, 2006

- The curriculum and the SABIS® books need to be revised carefully. SABIS® implements a rigorous programme which aims to prepare the students for Higher Education. In some areas (sciences, mathematics) the books include difficult concepts with very little explanations. As a result the teachers spend valuable time in order to digest the material. Given that they have 4 to 5 different courses they feel frustrated and overwhelmed. Therefore the school needs to plan for more teachers in every Department with less number of different courses. The reduction of the stress level among the teaching staff will lead to more time for training from the mentors and the Department Heads, and will cause more appetite for good instruction and finally less negativity among the staff. It is expected that more teachers will decide to stay for a longer term.
- Professional development is a key word for all workers but especially for teachers in the international education. They need to be aware of different curricula and teaching methods as things change continuously. It should not be forgotten that every Board (e.g. EDEXCEL, OCR, IB, and AP) has its own requirements and techniques.
- SABIS® has currently about 4,000 employees. There should be encouragement for maximization of the potential of that staff. An analysis of the background, experience and achievements of every employee could be used with the goal to offer possibilities for long term career within the network.
- As Coordinator one of my goals is to establish an atmosphere of mutual respect and confidence among my staff, to encourage mentoring and give a lot of support to the newcomers (sessions about discipline, seminars about effective teaching).

## 6.9 Use of the project

**SABIS®:** The conclusions of this project are mainly based on material taken from the school records. SABIS is a network of schools that expands very fast the last years. According to the existing plans the number of schools will be doubled the next 2 years. Even though the foundation of the system was done in the 19<sup>th</sup> century and there was continuity in the implementation and development of the organisation there is always room for new ideas and improvement. Our era is very demanding. Changes happen faster than in the past; the technology becomes the main tool in all fields, the people realise that in the near future the national borders become meaningless regarding employment. SABIS was designed to serve the needs of students who were living in the Middle East and were considered as well educated if they had a good knowledge of English, a solid base in the sciences and a social training through the SLO™ program. The expansion of the network in the Europe and the USA revealed the necessity for development of a more complicated and less conservative curriculum and educational system.

According to discussions I had with colleagues from other SABIS® schools all over the world and the official statistics, ISF appears to be a pioneer school. It operates only for 12 years but has achieved a lot of positive developments which influenced the future of the establishment. It was a coincidence that people passionate with the education were appointed almost simultaneously. They were sharing experiences from different educational systems and had the charisma of leadership. The hard work brought excellent academic results and they earned the trust of the owners of the network. New books were introduced, the English program became more suitable for native speakers and recently it was decided that ISF will offer the IB program. There is no doubt that revolutionary changes will happen in the school the next two years. For example new courses will be introduced (e.g. Theory of Knowledge), the SABIS Student Life Organization® will become open to the society and the students will earn a variety of experiences through laboratory and project work. For those of us who have the mission to implement the International Baccalaureate the success is the only option. In my opinion good results will send a strong message about the benefits of the combination of SABIS® methods with a modern, demanding and challenging programme that gives the



students the opportunity to earn a lot of experiences, enter the Institutions of their choice and become wise citizens of the globe.

I believe that this project includes very useful results for all stakeholders: the students, the parents, the teaching staff and the administration. The system offers academic and social added value but there is always room for improvement. It is true that implementing fashionable methods in education could lead to failure. The steps must be slow and confident, result of study of various factors. the academic added value include: the academic results of the students, the choice of different subjects, the standards of the curriculum, the frequent monitoring of student progress, the focus on continuation to Higher education, the acceptances to Universities, the instruction Leadership and the contribution of the educators.

**EDUCATION:** In ancient Greece, Socrates argued that education was about drawing out what was already within the student. (the word *education* comes from the Latin *e-ducere* meaning "to lead out.") At the same time, the Sophists, a group of itinerant teachers, promised to give students the necessary knowledge and skills to gain positions with the city-state. Webster defines *education* as the process of educating or teaching. *Educate* is further defined as "to develop the knowledge, skill, or character of..." Thus, from these definitions, we might assume that the purpose of education is to develop the knowledge, skill, or character of students. Unfortunately, this definition offers little unless we further define words such as *develop*, *knowledge*, and *character*. Obviously even the definition of the education is a matter of philosophical and political approach. In that respect trying to generalize the outcomes of a project related to added-value in the education seems not realistic.

Those educators who had the chance to spend their career in different countries and various systems have maybe realize that effective teaching is a life-long challenge. It requires from the part of the educator high level of culture, open minded approach, performance skills, individual fostering for each student, passion for improvement, absolute dedication. The educator has a mission to accomplish: to give the incentives and the necessary background to younger people to explore the world and change it. The educator is a role model for the students who can inspire but also traumatize their

souls and mind. He can be equally useful or dangerous no matter if he teaches in a small village in a third world country or in a very expensive private school. He can make the difference by supporting values, by fighting the racism, the violence and by teaching the pupils that the diversity brings beauty to our planet. One of the advantages of the International Schools is the absence of propaganda (political or religious). The students who have spent their school career in such an environment learn how to recognize friends among every culture and they do not have the artificial barriers of the politicians. Their education is based on different languages. Therefore they are equipped to study and work in many different countries worldwide.

The 21<sup>st</sup> century offers the opportunity to all of us who are passionate with education to communicate more than before. We exchange ideas, projects, learning tools and experiences. It is of less importance where we work. The magical world of internet gives us the possibility to work closer in order to improve our methodologies for the benefit of the students. The Education policy makers worldwide realize that their power has been diminished. The materials offered to the students such as books are not the only source of information anymore. The links to University Libraries are open to all. The knowledge has no limits. For those who believe that education is and leads to freedom this era will be a golden one for the education under the condition that we, the teachers pass the correct messages to our pupils and supervisors.

The above project has the main goal to add some arguments to the global discussion about the improvement of the education. A private school has usually better chances to have better equipment and staff because the financial means are crucial. Such a school has the possibility to hire good teachers and also to improve their skills by offering them professional development. The academic results are closely related to the reputation of the school there for the profits. The discipline is usually of very good standards and the influence of a peaceful environment is undoubtedly positive for the learning process. The sport and art facilities allow the students to develop components of their personality. A caring environment is the main added value of any educational system.

In my opinion the model of education offered by SABIS<sup>®</sup>, especially in Frankfurt has some elements that have been proved positive for the social and academic development of the students. The methods I have used to measure some aspects of the value offered to our students could possibly give the incentive to policy makers to review their

schemes and adjust them to a model that prepares young people for the new era that has already started. My main concern is the financial allowances given to education. In the majority of the countries the budget for the education is very low. The purpose of this decision is obvious. However, some educators are optimistic or simply naïve to believe that if we work with dedication and true passion we can make the difference for the next generations.

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# LITERATURE REVIEW

## Books

1. Aczel, A. (1996). Complete Business Statistics. New York: Richard Irwin
2. Anketell, D. (2001). Modeling for Added Value. Springer
3. Askew, S. (2001). Feedback for Learning. Routledge
4. Bassey, M. Case Study Research in Educational Settings (Doing Qualitative Research in Educational Settings S.) \*
5. Brolin, D. E. (1992). Life Centered Career Education: Personal-Social Skills. Reston, VA: The Council for Exceptional Children. Stock No. P368
6. Cohen, L. Research Methods in Education \*
7. Computer User Group, Fairfield University. (1993). A Plan for the Strategic Implementation, Use and Development of a University-wide Computing Environment. Fairfield, CT: Fairfield University
8. Corbin, J., & Strauss, A.L. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. Qualitative Sociology, 13(1), 3-21 \*
9. Danziger, J. (1985). Social Science and the Social Impacts of Computer Technology. Social Science Quarterly, 66, 1
10. Deitch, K. (May 1, 1994). A Price War for Higher Education. Change, 26(3), 53-54
11. DeLoughry, T. & Wilson, D. (June 22, 1994). Is New Technology Worth it?
12. Chronicle of Higher Education, 40(42), A19, A21
13. Denzin, N. (1984). The Research Act. Englewood Cliffs, NJ: Prentice Hall
14. DePalma, A. (November 27, 1991). As a Deficit Looms, 26 Threaten to Quit Key Columbia Posts. New York Times, 141(48797), A1
15. Devereux G. (New York 1969). Reality and Dream

16. Eller, J. Effective Group Facilitation in Education: How to Energize Meetings and Manage Difficult Groups (Paperback)
17. Evangelauf, J. (March 11, 1992). At Public Colleges more Double Digit Tuition Growth. Chronicle of Higher Education, 38(27), 29,32
18. Evans, W. H., Evans, S. S., & Shmid, R. E. (1989). Behavior and Instructional Management: An Ecological Approach. Boston: Allyn and Bacon.
19. Fairfield University Controller. (1995). Analysis of Revenue and Expenditures from Fiscal Year 1989 – 1995. Fairfield, CT: Fairfield University
20. Feagin, J., Orum, A., & Sjoberg, G. (Eds.). (1991). A Case for Case Study. Chapel Hill, NC: University of North Carolina Press \*
21. Gigerenzer, G. (Editor) & Selten, R. (Editor). Bounded Rationality: The Adaptive Toolbox (Paperback)
22. Glaser, B.G., & Strauss, A.L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine \*
- Kimball, A. J. (1996). Ethical Issues in Behavioral Research. Oxford: Blackwell
23. Kohn, A. (September 1999). The Schools Our Children Deserve. Houghton Mifflin \*
24. Kuniavsky, M. Observing the User Experience: A Practitioner's Guide to User Research (Morgan Kaufmann Series in Interactive Technologies)
- Laurel, B. Design Research : Methods and Perspectives
25. McBride, R. (1996) Teacher Education Policy: Some issues Arising from Research and Practice. Routledge \*
26. Malekoff. A. Group Work with Adolescents: Principles and Practice (Paperback)
27. McDonald, J. (1996). Redesigning School: Lessons for the 21st Century \*
28. Meyen, E. L., Vergason, G. L., & Whelan, R. J. (Eds.) (1988). Effective Instructional Strategies for Exceptional Children. Denver, CO: Love Publishing
29. Meyer, R. (2005) The Next Generation of Value Added and Indicators. Wisconsin

30. Center for Education Research. \*
31. McIntyre, T. (1989). The Behavior Management Handbook: Setting up Effective Behavior Management Systems. Boston: Allyn and Bacon
32. Moon, J. (1997). Developing Judgment
33. Peddle, M. T. (August 2001). Does Government Need to Be Involved in Primary and Secondary Education: Evaluating Policy Options Using Market Role Assessment. Garland Pub
34. Pole, C. J. (Editor) & Chawla-Duggan, R. (Editor). (July 1996). Reshaping Education in the 1990s: Perspectives on Primary Schooling. Falmer Pr \*
35. H. Seeman, Preventing Classroom Discipline Problems: A Classroom Management Handbook
36. Strauss, A.L.(1987). Qualitative analysis for social scientists. New York: Cambridge Univ. Press
37. Strauss, A.L., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage
38. Strauss, A.L., & Corbin, J. (1994). Grounded theory methodology: An overview. In N.K. Denzin & Y.S. Lincoln (Eds.), Handbook of qualitative research. Thousand Oaks, CA: Sage
39. Ramachandran, V. (August 2004). Gender and Social Equity in Primary Education: Hierarchies of Access. Sage Publications
40. Ramachandran, V. (Editor). (November 2003). Getting Children Back to School: Case Studies in Primary Education. Sage Publications
41. Ratcliff, D. (1995). For an Extensive Discussion of Qualitative Validity and Reliability
42. Rushkoff, D. (1999). Say it with Presentations: How to Design and Deliver Successful Presentations. New York: McGraw-Hill. 154 pp
43. Tannen, D. (1992). How to Conduct Your Own Survey. New York: John Wiley. 232 pp
- The Ethics of Educational Research. (1989). Lewes: Falme , Burgess (ed) \*

44. Weinert, Franz E. (Hg.) 2001, Leistungsmessungen in Schulen, Weinheim / Basel \*
45. Beardsley, G. & Hartnett, P. (October 1998). Exploring Play in the Primary Classroom. David Fulton Pub
46. Bishop, G. (November 1989). Alternative Strategies for Education. Palgrave Macmillan \*
47. Blumenstyk, G. (November 1994). Colleges Struggle to Develop Formal Strategies to Pay for Computing. Chronicle of Higher Education, 41(10), A44-45
48. K. F. Riley, M. P. Hobson and S. J. Bence. The mathematical Methods for Physics and Engineering, Second edition
49. SABIS® Handbook
50. Bowers, J.H. & Burkett, G.W. (1987). Relationship of student achievement and characteristics in two selected school facility environmental settings. Edmonton, Alberta, Canada: 64th Annual International conference on the Council of Educational Facility Planners. (ERIC document Reproduction Service No. ED286278)
51. 52. Chan, T. C. (1979). The impact of school building age on the achievement of eighth grade pupils from the public schools in the state of Georgia. Unpublished doctoral dissertation, University of Georgia, Athens.
52. Frazier, L.M. (1993). Deteriorating school facilities and student learning. Washington D.C.: Office of Educational Research and Improvement.
53. Holt, C.R. (1994). Critical factors that affect the passage of school bond elections. School Business Affairs, 60(8), 33-37.
54. Ikpa, V.W. (1992). The norfolk decision: The effects of converting from a unitary educational system to a dual educational system upon academic achievement. Norfolk City Schools, Virginia. (ERIC Document Reproduction Services No. ED346583)
55. McGuffey, C.W. And Brown, C.L. (1978) The impact of school building age on school achievement in Georgia. CEFPI Journal, 16, 6-9.

56. McGuffey, C.W. (1982). Facilities. In H.J. Walberg, Improving educational standards and productivity (pp. 237-281). Berkley, California: University of Illinois.
57. Plumley, J.P. Jr. (1978). The impact of school building age on the academic achievement of pupils from selected schools in the state of Georgia.  
Unpublished doctoral dissertation, the University of Georgia, Athens.
58. Thomas, J.A. (1962) Efficiency in education: A study of the relationship between selected inputs and mean test scores in a sample of senior high school.  
Unpublished doctoral dissertation, Stanford University.
59. McGuffey, C.W. And Brown, C.L. (1978) The impact of school building age on school achievement in Georgia. CEFPI Journal, 16, 6-9.
60. McGuffey, C.W. (1982). Facilities. In H.J. Walberg, Improving educational standards and productivity (pp. 237-281). Berkley, California: University of Illinois.
61. Plumley, J.P. Jr. (1978). The impact of school building age on the academic achievement of pupils from selected schools in the state of Georgia.  
Unpublished doctoral dissertation, the University of Georgia, Athens.
62. K. F. Riley, M. P. Hobson and S. J. Bence, The mathematical Methods for Physics and Engineering
63. Thomas, J.A. (1962) Efficiency in education: A study of the relationship between selected inputs and mean test scores in a sample of senior high school.  
Unpublished doctoral dissertation, Stanford University.



## Internet Research \*

1. <http://www.telegraph.co.uk/education/main.jhtml?xml=/education/>
2. <http://www.economist.com/research/Backgrounders/displaybackgrounder.cfm?bg=89>
3. <http://www.ajph.org/>
4. <http://www.A:\Reflexivity%20as%20Method.htm>
5. <http://www.Endelclock.com>
6. [http://www.The Independent//A:\TEACHER%TALK.htm](http://www.TheIndependent//A:\TEACHER%TALK.htm)
7. <http://www.ryerson.ca/~mjoppe/ResearchProcess/ProblemDefinition.htm>
8. <http://www.bellaonline.com/articles/art32915.asp>
9. [http://www.cre.gov.uk/gdpract/ed\\_cop\\_scot\\_assess.html](http://www.cre.gov.uk/gdpract/ed_cop_scot_assess.html)
10. [http://www.rethinkingschools.org/archive/15\\_01/Val151.shtml](http://www.rethinkingschools.org/archive/15_01/Val151.shtml)
11. <http://www.timesonline.co.uk/article/>
12. <http://www.webarchaeology.com/html/ethnogra.htm>
13. <http://www.aaanet.org/stmts/irb.htm>
14. <http://www.nova.edu/ssss/QR/QR3-3/tellis2.html>
15. [http://www-rcf.usc.edu/~genzuek/Ethnographic\\_Research.html](http://www-rcf.usc.edu/~genzuek/Ethnographic_Research.html)
16. <http://www.isf-net.de/StudentLife/>
17. <http://www.gslis.utexas.edu/~ssoy/usesusers/1391d1b.htm>
18. <http://edis.ifas.ufl.edu/pdf/FY/FY39400.pdf>
19. [http://www http://www.badlanguage.net/?p=325](http://www.badlanguage.net/?p=325)
20. <http://www.fao.org/docrep/W3241E/w3241e05.htm>
21. <http://stringers.media.mit.edu/interview.htm>
22. <http://www.scu.edu.au/schools/gcm/ar/arp/grounded.html>
23. [http://en.wikipedia.org/wiki/Grounded\\_theory\\_\(Glaser\)](http://en.wikipedia.org/wiki/Grounded_theory_(Glaser))
24. <http://www.nmsa.org/AboutNMSA/ThisWeBelieve/The14Characteristics/tabid/1274/Default.aspx>
25. <http://www.resiliency.com/htm/turnaround.htm>

26. <http://www.nwrel.org/scpd/sirs/5/snap18.html>
27. [http://www.ascd.org/authors/ed\\_lead/el200502\\_safer.html](http://www.ascd.org/authors/ed_lead/el200502_safer.html)
28. <http://www2.edtrust.org/NR/rdonlyres/5704CBA6-CE12-46D0-A852-D2E2B4638885/0/Spring04.pdf>
29. [http://www.cgp.upenn.edu/ope\\_value.html#1](http://www.cgp.upenn.edu/ope_value.html#1)
30. <http://dpi.state.wi.us/sig/improvement/index.html>
31. <http://www.nsba.org/site/doc.asp?TRACKID=&CID=90&DID=40413>
32. <http://www.ncrel.org/sdrs/areas/issues/students/atrisk/at6lk11.htm>
33. <http://www.bi.no/cemFiles/HEAD%20seminar%2010th%20March%202006/Jukka%20Alava%20The%20Finnish%20PISA%20Success%20and%20the%20Role%20of%20principals.pdf>
34. <http://news.bbc.co.uk/1/hi/education/6559199.stm>
35. [http://www.all4ed.org/whats\\_at\\_stake/elements.html](http://www.all4ed.org/whats_at_stake/elements.html)
36. <http://dpi.state.wi.us/sig/assessment/success.html>
37. <http://www.nmsa.org/Research/ResearchSummaries/DevelopmentalCharacteristics/tabid/1414/Default.aspx>
38. <http://readyweb.crc.uiuc.edu/library/1994/sreb-gsr/cur-ass.html>
39. <http://www.isf-net.de/academics/index.htm>
40. [http://www.isf-net.de/student\\_life/index.htm](http://www.isf-net.de/student_life/index.htm)
41. <http://exchanges.state.gov/forum/vols/vol43/no4/p10.htm>
42. <http://iteslj.org/Lessons/King-PublicSpeaking.html>
43. [http://www.dest.gov.au/NR/rdonlyres/434FFF80-183F-4C4F-98EF-D4ED3FF21D3B/9408/info\\_booklet\\_schools.pdf](http://www.dest.gov.au/NR/rdonlyres/434FFF80-183F-4C4F-98EF-D4ED3FF21D3B/9408/info_booklet_schools.pdf)
44. <http://www.physics.pomona.edu/sixideas/imfiles/im03.pdf>
45. [http://www.cse.ucla.edu/products/parents/cresst\\_challengesshepard.pdf](http://www.cse.ucla.edu/products/parents/cresst_challengesshepard.pdf)
46. <http://www.maa.org/SAUM/maanotes49/58.html>

## Articles \*

1. (2005). 'Assessment and Allocation to Teaching Groups', Commission for Racial Equality 2005, Vol. 3, 12
2. Bennett, D. C. (president of Earlham College) (Spring 2001). 'Assessing Quality in Higher Education', Liberal Education, Vol. 87, 2
3. Berg E., (Language Arts teacher), Summer Diary #6
4. Blair, A. & Halpin, T. (2005) 'Muslim School Offers Best Added Value', The Times, 24-28
5. Bracey, G. W. (Fall, 2000). 'Value Added, Value Lost?', Rethinking Schools, 35-51
6. Brügelmann, Hans 2004, Kerncurricula, Bildungsstandards und Leistungstests. Zur unvergänglichen Hoffnung auf die Entwicklung der guten Schule durch eine Evaluation „von oben“, in: VWPäd 4/2004, 415-441
7. Brügelmann, Hans 2004, „Standards vorgeben?“, in: Pädagogik 3/2004, 51
8. Callaway, R. (1979) Teachers' Beliefs Concerning Values and the Functions and Purposes of Schooling, Eric Document Reproduction Service No. ED 177 110
9. (June 21, 2005). 'Britain's Schools' The Economist, 32-37
10. Chambers Clark, C. (2001-2005). 'Gifted Education', EdD, RN, 2-15
11. Cooke, A. (2005). 'The Independent Sector Needs Resources and Passion to Expand', Copyright of Telegraph Group Limited, Vol. 1, 22-31
12. Doral, H., Drury, D. (January, 2003). 'The Value of Value- Added Analysis', National School Boards Association, 132-141
13. Dorhauer, C. (MD), updated by Raore, B. (Creighton University). (2002, updated in 2005). 'Ethical Considerations', Vol. 6, 25-31
14. Fook, J. (School of Social Inquiry, Deakin University, Geelong, Australia). (1991-2005). 'Reflexivity as Method', Health Sociology Review, (eContent management Pty Ltd), 322-345
15. Greene, J. P. (Hoover Institution, Leland Stanford Junior University). (2002). 'The Business Model', 46-51

16. Herrmann, Ulrich 2003, „Bildungsstandards“ – Erwartungen und Bedingungen, Grenzen und Chancen, in ZP 5/2003, 625-637
17. Herrmann, Ulrich 2004, Alternativen zum Schwindel mit „Bildungsstandards“ – Ein Zehn-Punkte-Pogramm, in: Die Deutsche Schule, 2/2004, 134-134.
18. Hersh, R. H. (Denver). (June 15, 2004). ‘Assessment and accountability: unveiling value added assessment in Higher Education’, Vol. 1, 67-72
19. Kim, S. (University of Minnesota). (Spring 2003). ‘Research Paradigms in Organizational Learning and Performance: Competing Modes of Inquiry’, Information Technology, Learning and Performance Journal, Vol. 21, 1
20. Linares, M. (July 21 2005). ‘Teacher Talk: The J8 Project Made us Feel as Though we Had Been Involved in Something Historic’, The Independent, 33-34
21. Lisman, C. D. & McCracken, S. (English Café – DuoUC, Community College of Aurora, Colorado). ‘Ethics in the Curriculum’, 21-24
22. Mahoney, J. W. (American Association of School Administrators). (July 28 2005). ‘Why Add Value in Assessment?’, 146-147
23. (Copyright 2004). ‘Market Feasibility and Competitive Intelligence Market Research’, Market Street Research, 355-357
24. Page, D. (University of California, Los Angeles). (January 8 2002). ‘Special Interests Undermine Objectivity of Scientific Research’, Vol. 2, 8
25. (Updated October 2004). ‘Privacy, Confidentiality, and Design Considerations’, Webster University Institutional Review Board, 324-327
26. Problem Definition  
(<http://www.ryerson.ca/~mjoppe/ResearchProcess/ProblemDefinition.htm>),  
22/07/05
27. Schlömerkemper, Jörg (Hg.) 2004, Bildung und Standards. Zur Kritik der „Instandardsetzung“ des deutschen Bildungswesens (Die Deutsche Schule. Zeitschrift für Erziehungswissenschaft, Bildungspolitik und pädagogische Praxis, Beiheft 8)
28. (July 27 2005). ‘Reliability’, Asia Market Research, Com, Sponsorship Info, 76

29. Trochim, W. M. K. (January 16 2005). “‘Well Begun is Half Done’- Aristotle, Quoting an Old Adverb’, Vol. 32, 5
30. Turnbaugh Lockwood, A. (Summer 2005). ‘Expert Opinion: Andrew Porter and Value – Added Assessment’, A Publication of the Northwest Regional Educational Laboratory, Vol. 10, 4
31. (July 26 2005). ‘Warning Over Reforms to Teachers’ Workload’, Press Association, The Guardian, 12
32. (November 27 2004). ‘Who Needs a Bad Teacher When You get a Worse Judge?’ The Economist , 41
33. Triangulation thinking, Dr. Sharon L. Bender, January 2005, 67
34. Research Matters / How Student Progress Monitoring Improves Instruction  
*Nancy Safer and Steve Fleischmann, Vol. 1, 6*

# APPENDIX ONE

**Dear All,**

**The attached questionnaire is distributed to members of the ISF community (parents, teachers, students and staff) regarding the following doctoral level project:**

**'Methods of measuring the Added Value that SABIS® offers to its students.'**

The success of the above effort is considerably depended on your response. I would like to thank you for your time and precious feedback, which will remain strictly confidential. You are kindly requested to send me your answers till the 15<sup>th</sup> of March 2006:

1. By e-mail: [vpapafakli@isf-sabis.net](mailto:vpapafakli@isf-sabis.net)
2. You could hand them over to the reception of ISF or to my office (Room 2510)
3. By mail: Vivian Papafakli-Strouza  
Rossertstrasse 12A  
65830 Kriftel  
Frankfurt am Main  
Deutschland

With this opportunity I would like to thank those of you who had already answered this questionnaire during Summer school.

Kind Regards

Vivian Papafakli-Strouza

# **APPENDIX TWO**

## **QUESTIONNAIRE:**

1. Why ISF and not another school?
2. Do you think that the new students have a smooth integration into ISF?
3. Placement tests: Is their importance social only, academic only, both? Why?
4. ISF believes that SLO™ offers added value to the students. Do you agree? Why?
5. ISF believes that group work offers added value to the students. Do you agree? Why?
6. Name the 5 most important factors for you that will define social added value for a student.
7. Name the 5 most important factors for you that will define academic added value for a student.
8. In which specific areas should ISF improve in order to increase the social added value for the students?
9. In which specific areas should ISF improve in order to increase the academic added value for the students?

# APPENDIX THREE

**Dear parent / guardian,**

I would like to thank you in advance for your time. Your feedback is very important for the ISF community as we all strive for excellence.

Warm regards

**Vivian Papafakli-Strouza**

**Head of Mathematics**

## Questionnaire

1. Which are the three most important reasons for which you have decided to enrol your child to an International School?

- ☐ The education provided is of higher standards than the German Education system.
- ☐ The members of your family have different cultural backgrounds.
- ☐ You have no better choice. You just moved to Germany from abroad.
- ☐ You have chosen the international education because is paid by the company where one of the guardians works.
- ☐ You believe that the International School will offer added value to the education of your child.
- ☐ Other. Please, specify.

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2. ISF operates for 10 years. Please choose the 3 more significant factors for which you feel that ISF will be a good choice for your child.

- ☐ Excellent academic results.
- ☐ Smooth integration of newcomers.
- ☐ Dedicated, experienced and hard working staff.
- ☐ SABIS® where ISF belongs, offers a unique educational approach and continuous assessment.
- ☐ SABIS Student Life Organization® enhances the ability of students academically and socially.
- ☐ The school has earned a very good reputation.
- ☐ No severe discipline problems exist.
- ☐ The school offers sport facilities of very high standards.
- ☐ Other. Please, specify.
- ☐ \_\_\_\_\_

\_\_\_\_\_

3. Choose the 5 most important factors, which in your opinion develop the social added value for a student during the school day.

- ☐ The diverse community and the support of the school for international understanding.
- ☐ The safe and peaceful school community.
- ☐ Group work.
- ☐ Reinforcement of student's creativity.
- ☐ Good relationship between teachers and students.
- ☐ Improvement of Leadership and Communication skills.
- ☐ Discovery of talents and capabilities.
- ☐ The involvement of a student in SABIS Student Life Organization<sup>®</sup>.
- ☐ The various courses contribute to the exploration of life skills, truths, values and new perspectives.
- ☐ Other. Please, specify.

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4. Choose the 5 most important factors, which in your opinion influence the academic added value for a student.

- ☐ Individual fostering
- ☐ Immediate problem solving feedback.
- ☐ Regular testing.
- ☐ Class size.
- ☐ University Counselling
- ☐ Language skills.
- ☐ Focus on continuation to Higher education
- ☐ Competence and engagement of international teachers.
- ☐ The students feel challenged.
- ☐ All scores of exams count.
- ☐ Extracurricular activities.
- ☐ Other. Please, specify.

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5. Please, describe briefly the 3 main factors you check to decide if ISF offers to its students the added value that promises.

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# Acknowledgements

As regards the support I received, first of all, I would like to mention the precious help of my advisors Dr. Drossos and Dr. Klein in providing guidance and comments to my drafts.

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Finally, I should not forget to acknowledge the patience of my daughter Corina who has always supported me by taking extra responsibilities. Her positive behaviour allowed me to find the time to work and realise my dream.

I hope that the community of education will benefit from the efforts and the dedication of all the people mentioned above.

## **General comments:**

The project will be announced to all parents and students through the Friday Update, which informs the members of the ISF community about all events that take place in the school.